

UNGASS COUNTRY PROGRESS REPORT

THAILAND



Reporting period:
January 2006 – December 2007



National AIDS Prevention and Alleviation Committee

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ABBREVIATIONS

AEM	Asian Epidemic Model
AFRIMS	Armed Forces Research Institute of Medical Sciences
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Clinic
ART	Antiretroviral Therapy
ARV	Antiretrovirals
ASO	AIDS- Response Standard Organization
BATS	Bureau of AIDS, TB and STIs
CAB	Community Advisory Board
CAR	Center for AIDS Right
CCM	Country Coordinating Mechanism
CQI	Continuous Quality Improvement
DLPW	Department of Labour Protection and Welfare
EQA	External Quality Control
GDP	Gross Domestic Products
GFATM	Global Fund to fight AIDS Tuberculosis and Malaria
HIV	Human Immunodeficiency Virus
HIV-NAT	The HIV Netherlands Australia Thailand Research Collaboration, Thai Red Cross, AIDS Research Centre
IDU	Injecting Drug Users
IHQIA	Institute for Hospital Quality Improvement and Accreditation
ILO	International Labour Organization
IPSR	Institute of Population and Social Research
M&E	Monitoring and Evaluation
MOL	Ministry of Labour
MOPH	Ministry of Public Health
MSM	Men having Sex with Men
MSW	Male Sex Workers
NAPAC	National AIDS Prevention and Alleviation Committee
NAPHA	National Access to Antiretroviral Program for PHA
NASA	National AIDS Spending Assessments
NGO	Non-Government Organization
NHSO	National Health Security Office
OI	Opportunistic Infections
PHOM	Perinatal HIV Outcome Monitoring Surveillance System
PLHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother – To – Children Transmission
QI	Quality Improvement
SR	Sub Recipient
STD	Sexually Transmitted Disease
SW	Sex Workers
SWING	Service Workers In Group
TB	Tuberculosis
TBCA	Thailand Business Coalition on AIDS
THE	Total Health Expenditure
TICA	Thailand International Development Co-operation Agency
TUC	Thai MOPH - US-CDC-collaboration
UA	Universal Access

UNAIDS	United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNIFEM	United Nations Development Fund for Women
UNODC	United Nations Office on Drugs and Crime
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

I Status at a glance

1. The Inclusiveness of the stakeholders in the report writing process

As per follow-up to the United Nations General Assembly Special Session (UNGASS) Declaration of Commitment on HIV/AIDS in 2001, Thailand not only contributed successfully to the submission of the 2008 Country Progress Report to UNAIDS for monitoring results following the country's commitment throughout the past two years, it also seeks to develop the mechanism in monitoring the country's progress, with the continual participation of diverse sectors ranging from the government, non-governmental organizations, civil society, academics, international organizations and development partners. Such a mechanism will entail a national sharing database that is utilizable efficiently for HIV/AIDS prevention and alleviation.

The reporting process consequently emphasized the participation of all sectors since the beginning to the completion of the report. The process started from a discussion meeting with working groups of all sectors to initially recognize the objectives of the reporting and to obtain their collaboration. Responsibilities were shared and the process of continued planned activities was agreed among the groups, and the framework was set up. In addition, the guidelines on construction of core indicators of the 2008 reporting was translated into Thai, and the publication was distributed to the joined forces and those concerned or interested.

The working group structure consists of 3 groups including the working group for overview analysis, the working group for individual indicators, and the report writing secretariat. The combination of such sectors as government, civil society, academics and international organizations contributed in all working groups. Each group compiled all relevant data and information before presenting them to the forum for careful examination and soliciting a wider range of opinions and comments given by members of sectors from both central and regional parts of Thailand.

The report at the final stage was submitted for the endorsement of the Program, Budget, Monitoring and Evaluation Coordination Sub-Committee, appointed by the National Committee for HIV and AIDS Prevention and Alleviation.

In addition to participating in planning, collecting, compiling and analyzing for this report writing, the Thai civil society, represented by the Raks Thai Foundation in coordination with GESTOS, conducted a study relating to sexual health and reproductive health. Some findings were used to evaluate progress and pointed out challenges which led to discussion among the concerned sectors for remedial actions in the next period.

2. The Status of Epidemic

The data compiled from the HIV infection surveillance system concluded that the present epidemic dynamic has evolved to a combined generalized and concentrated epidemic. The trend of HIV prevalence in military conscripts and ANC clients had reached a peak at 3.40% and 2.29% in 1995 and 1992 respectively, and reduced to plateau at 0.40% and 0.84% in 2007 and 2006 respectively.

The increasing trend of HIV prevalence in ANC women at 2nd and 3rd pregnancies indicates that the infection is spreading more deeply into families in general, and probably will remain at relatively high levels going forward.

For other groups, the trend of HIV prevalence has declined with the notable exception of IDUs and MSM. The data of ad hoc studies indicate that there were linkages of infection among the most-at-risk populations including SW, MSM, IDU and other populations.

The downward trend of prevalence in direct and indirect female sex workers and male sex workers at STD clinics has been continuous, excluding Bangkok where the prevalence trend in male STD clinic clients has not declined. Despite the decline of HIV among IDU in the north, it nevertheless remained high, with increasing trends in Bangkok and the central region.

The regional epidemic trends are most improved in the north as compared to other regions. In the south, the trend of HIV decline was the least. The epidemics in each of the regions are converging at the same level, and the epidemic trend in the south has lagged behind the other regions.

The PMTCT policy and the implementation with high coverage could obviously reduce the infection in the children. In 2003, the percentage of vertical transmission was at 6.4% and then declined to 1.0% in 2006.

Estimations from the computer modeling software were applied to Thailand in 2000 (the Asian Epidemic Model - AEM). The HIV epidemiological database was updated in 2005. When controlling for the level of prevention effort it was found that in 2007 that the number of new infections was estimated at 13,936. This number is projected to continue to decline to be at 10,097 in 2011 resulting in the total cumulative number of PLHA at 546,578 in 2007 with a decline to 481,770 in 2011.

Based on the above estimate during 2007-2011, the proportion of new infections by population group and risk behavior revealed that new infection in women infected by their husband or sexual partners and in MSM are higher than through other routes of transmission.

In spite of the reduced prevalence as detected by the surveillance system in general, however, there was also a warning for Thailand that the epidemic could reverse these downward trends. According to the pilot studies of HIV infection incidence in 2004-2007, it was found that the incidence of HIV in ANC and indirect SW groups tended to increase. The behavioral surveillance relating to risks to HIV infection in various groups of population also suggested continued and new opportunities for HIV spread.

3. The Policy and Programmatic Response: National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation

During 2004-2005, Thailand had conducted a mid-term review of the previous National HIV/AIDS Prevention and Alleviation plan (2002-2006) on the HIV/AIDS status and implementation system. Apart from the internal teams concerned, the review was joined by representatives of international organizations. The National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation was subsequently formulated to supersede the previous plan which ended in 2006.

The Plan was endorsed by the National Committee for HIV and AIDS Prevention and Alleviation which presented this for the cabinet's approval for the adoption of the National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation (2007-2011), representing the fourth version following the first in 1992. The Plan's conceptual framework aims to forge the partnerships of government agencies, civil society and development partners for integrated HIV/AIDS prevention and alleviation, with the following essence: -

The goal and the National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation (2007-2011) are as follows: -

1. People adopt behaviors and the ability to prevent themselves and families safely and appropriately from HIV infection and transmission;
2. People living with HIV, AIDS patients and those who are affected by AIDS have good quality of life and the ability to live together peacefully and enjoyably in society;
3. Families and communities have value and an environment that provide further convenience for the protection of themselves and other members from infection, stigma and discrimination, and can live together with the people living with HIV and AIDS peacefully and enjoyably, including full participation in most aspects of AIDS prevention and alleviation.

Two objectives were defined, as follows:

1. To integrate strategies of AIDS prevention and alleviation into organizations at all levels, and to promote collaboration across sectors;
2. To integrate strategies of prevention, care, treatment and impact reduction into service provision for all target population groups.

Towards the goal, the results were identified at the end of the strategic plan in 2011 as follows:-

1. Based on current estimation, new HIV infections have been reduced by half;
2. HIV infected persons and AIDS patients who are in need of treatment with anti-retroviral drugs are able to enjoy universal access to said treatment;
3. HIV infected persons, AIDS patients, their families and those who are affected by AIDS who are in need of social services are able to ensure at least 80% of their universal access to social support.

Four strategies set forth as follows:-

Strategy 1: Management to integrate AIDS response into sectors

Strategy 2: Integration of prevention, care, treatment and impact mitigation according to target populations

Strategy 3: Protection of AIDS rights

Strategy 4: Monitoring, evaluation, research and development of knowledge for AIDS prevention and alleviation

Target groups in the strategies

The situational analysis of HIV/AIDS epidemic combined with estimation projections give rise to the goal for the reduction of new HIV infections by half. The strategic plan was as thus defined for implementation in different populations, comprising

- Husbands and wives or discordant couples
- Men who have sex with men
- Sex workers and their clients
- Drug users
- Children and adolescents
- Other groups including prison inmates, migrant labors, Thai laborers abroad, laborers in the workplaces, ethnic minorities and undocumented residents, displaced persons in temporary shelters.

Accelerating Policy on HIV/AIDS Prevention and Alleviation at the local level

Resulting from the governmental reform with decentralization to the local administration, this strategic plan was different from previous plans by becoming a guideline for the government agencies and other sectors to utilize the structure in consideration of setting up local plans/projects in order to formulate the budget plan of implementation. In accelerated and monitored implementation for the fiscal year of 2007, the Prime Minister's Office has designated HIV/AIDS as a focus of the Inspector General's office and for integrated monitoring. The following 6 policy issues have been emphasized:-

1. Promote the provincial HIV/AIDS prevention and alleviation sub-committee to coordinate integrated implementation of provincial agencies concerned, including the government, local and community sectors;

2. Create understanding and build capacity of the local administration in taking responsibility of local HIV/AIDS prevention and alleviation;
3. The community awareness raising in HIV prevention;
4. HIV Prevention among youths in school at all levels including non-formal education centers and educational expansion schools;
5. HIV Prevention among the labor force in the workplaces;
6. Strengthen community's education about AIDS that leads to the understanding of community and social members, which will allow HIV and AIDS patients to access services and live happily in the society;

4. UNGASS Indicator data and overview table

The overview table demonstrates the status of Thailand's implementation of 2008 reporting and analysis of the changes compared to those of 2004 and 2006 reporting.

Table 1: UNGASS Indicator data and overview table

Core indicators	Data	Remarks
NATIONAL COMMITMENT AND ACTION		
1. Domestic and international AIDS spending by categories and financing source	2008 reporting: 6,728,020,682 Baht	<ul style="list-style-type: none"> ▪ Compile secondary data on actual expenditure on HIV/AIDS from financing agents. ▪ Impute based on PQ approaches (P refers to price/unit cost, Q refers to services rendered)
NATIONAL PROGRAMS		
3. Percentage of donated blood units	2008 reporting: 99.79	<ul style="list-style-type: none"> ▪ In 2008, data from the National Blood Centre, Thai Red
	2006 reporting	

Core indicators	Data	Remarks
screened for HIV in a quality assured manner	2006: 100.0	Cross Society and other hospitals included. ▪ Donated blood was 100% screened. Anyhow, there were no evidence of quality assurance in 36 hospitals
	2004 reporting: 99.9	
4. Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy	2008 reporting: 2006 : 41.0 2007 : 52.9	▪ According to the national ART, treatment for either symptomatic or asymptomatic with CD4 lower than 200 cell/cubic mm.; Denominator also included asymptomatic ▪ If denominator include only symptomatic, the coverage will be 69.8% and 84.8% in 2006 and 2007 respectively ▪ According to Thailand standards, PLHA is

Core indicators	Data	Remarks
		checked for CD4 every 6 month;
5. Percentage of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission	2008 reporting: 2007: 95.90 2006: 90.10 <hr/> 2006 reporting: 2005: 89.77	<ul style="list-style-type: none"> ▪ Adjusted by % under reported; i.e. 25.9 and 43.5% respectively.
6. Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV	2008 reporting: : 32.60	<ul style="list-style-type: none"> ▪ Patient infected both TB/HIV will be treated with ARV when CD4 is lower than 250 cell/cu.mm

Core indicators	Data	Remarks
7. Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results	2008 reporting: 19.10	<ul style="list-style-type: none"> ▪ Data of National Sexual Behavior Survey of Thailand 2006. Sample are male/female of age 18-49
8. Percentage of most-at-risk populations that have received an HIV test in the last 12 months and who know their results	2008 reporting: SW: 52.60 MSM: 34.90 IDU: NA	<ul style="list-style-type: none"> ▪ FSW: Behavioral surveillance survey ▪ MSM: Special survey in 3 provinces
9. Percentage of most-at-risk populations reached with HIV prevention programs	2008 reporting: : NA	
10. Percentage of orphaned and vulnerable children	2008 reporting: : NA	<ul style="list-style-type: none"> ▪ Thailand has HIV prevalence in pregnant women < 5%

Core indicators	Data	Remarks
aged 0–17 whose households received free basic external support in caring for the child		<ul style="list-style-type: none"> ▪ Survey of MICS conducted in 2005-2006 Orphaned and vulnerable of all causes being supported 21.1%
11. Percentage of schools that provided life skills-based HIV education in the last academic year	2008 reporting: : NA	<ul style="list-style-type: none"> ▪ In 2007, Thailand had 3 patterns, school covered: 40.5% <ol style="list-style-type: none"> 1. At least 5 hours a year, inserted in the subject 2. At least 10 hours an academic year, life skills and sex education taught 3. At least 16 hours an academic year, intensive class of sex education
KNOWLEDGE AND BEHAVIOUR		
12. Current school attendance among orphans and among non-orphans	2008 reporting: : Orphans: 95.50 Non-Orphans: 96.40	<ul style="list-style-type: none"> ▪ Survey of MICS collected between December 2005 – February 2006

Core indicators	Data	Remarks
aged 10–14		
13. Percentage of young women and men aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	2008 reporting: : 39.50 2006 reporting: 31.15 2004 reporting: 18.67	<ul style="list-style-type: none"> ▪ Reporting used data from National Sexual Behavioral Survey of Thailand 2006. Sample group: male/female, aged 18-24 ▪ 2004, 2006 reporting used data from survey on vocational students
14. Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who	2008 reporting: SW: 28.40 MSM: 25.30 IDU: 49.10	<ul style="list-style-type: none"> ▪ FSW: Behavioral surveillance survey ▪ MSW: Special survey in 3 provinces ▪ IDU: Behavioral surveillance survey

Core indicators	Data	Remarks
reject major misconceptions about HIV transmission		
15. Percentage of young women and men aged 15–24 who have had sexual intercourse before the aged 15	2008 reporting: 13.40	<ul style="list-style-type: none"> ▪ 2008 Reporting used data from the National Sexual Behavioral Survey of Thailand 2006. Sample group is male and female youth of aged 18-24 ▪ 2004 reporting used data from survey on vocational students
	2006 reporting: : 12.10	
	2004 reporting: : 6.39	
16. Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the last 12 months	2008 reporting: 9.40	<ul style="list-style-type: none"> ▪ Data from the National Sexual Behavioral Survey of Thailand 2006. Sample group is male and female youth of aged 18-49
17. Percentage of women and	2008 reporting: 50.9	<ul style="list-style-type: none"> ▪ Data from the National Sexual Behavioral

Core indicators	Data	Remarks
<p>men aged 15–49 who had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse*</p>		<p>Survey of Thailand 2006. Sample group is male and female youth of aged 18-49</p>
<p>18. Percentage of female and male sex workers reporting the use of a condom with their most recent client</p>	<p>2008 reporting: : 96.20</p>	<ul style="list-style-type: none"> ▪ Only female sex workers
<p>19. Percentage of men reporting the use of a condom the last time they had anal sex with a male partner</p>	<p>2008 reporting: 89.90</p>	<ul style="list-style-type: none"> ▪ Special survey in 3 provinces

Core indicators	Data	Remarks
20. Percentage of injecting drug users reporting the use of a condom the last time they had sexual intercourse	2008 reporting: 35.00	<ul style="list-style-type: none"> HIV prevention among IDU in Bangkok
21. Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they injected	2008 reporting: : NA	
IMPACT		
22. Percentage of young women and men aged 15–24 who are HIV infected*	2008 reporting: 0.64	<ul style="list-style-type: none"> HIV Prevalence of ANC from HIV infection surveillance, aged 15-24
	2006 reporting: : 0.45	
	2004 reporting: 0.95	
23. Percentage of most-at-risk populations who are HIV	2008 reporting: Yr 2007 FSW: 5.00 MSM: 24.60	<ul style="list-style-type: none"> Sentinel sero-surveillance Sample: IDU - 2007 464

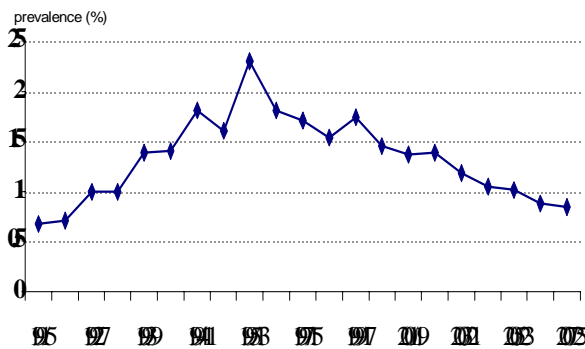
Core indicators	Data	Remarks
infected	IDU: 27.80	persons
	2006 reporting: Yr 2007 FSW: 5.15 MSM: NA IDU: 37.64	- 2005 485 persons - 2003 1,342 persons
	2004 reporting: : Yr 2006 SW: 6.70 MSM: NA IDU: 46.80	
	24. Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	2008 reporting: 84.90

II Overview of the AIDS Epidemic

Epidemiological Pattern of HIV

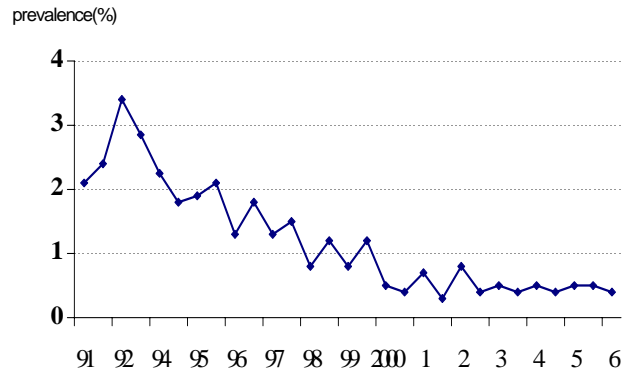
Thailand identified its first case of HIV in 1984. The subsequent response from all segments of government and society helped to slow transmission. At the same time, the pattern of HIV spread began to evolve from a concentration among populations with the highest risk behaviors to a more disseminated epidemic among the general population. Data from the national sentinel surveillance among army recruits and pregnant women showed HIV peak prevalence reaching 3.4% and 2.3% by 1992 and 1995 respectively, and then declining to 0.4% and 0.8% in 2006 and 2007 respectively.

Figure 1: Sentinel sero-surveillance: pregnant woman



Source: HIV Sero Surveillance, Bureau of Epidemiology, Thailand

Figure 2: HIV prevalence among army recruits



Source: HIV serosurveillance AFRIMS

Since 2001, the prevalence of HIV among pregnant women was higher for higher gravida, with the sole exception occurring in 2003. The rate of decline among higher gravida women was also lower than that for lower gravida women. In the three years from 2003-2006 the prevalence of HIV among gravida 2 women showed declining trends, in contrast to that for women of gravida 1 or 3. Younger pregnant women (age 15 to 24) show distinctly declining HIV prevalence, while pregnant women age 25-29 remained the group with highest HIV prevalence over the past six years. These data imply that HIV continues to make in-roads at the family level, and this situation needs to be closely monitored in the coming years.

Figure 3: HIV prevalence among ANC clients by gravida

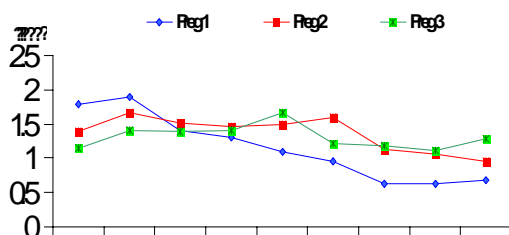
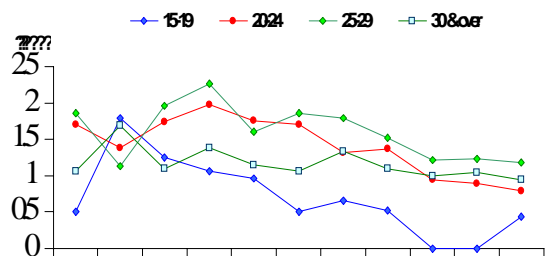
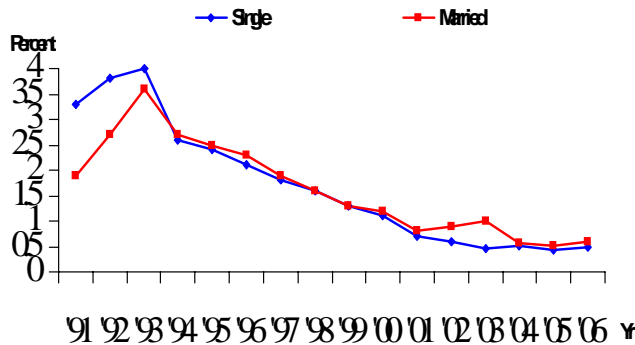


Figure 4: HIV prevalence among ANC clients by age group



HIV prevalence among males aged 21 to 23 declined steadily over time however, since 2003 the declines have slowed, and prevalence has remained constant up to the present at about 0.4 to 0.5%. However it is noteworthy that, at the beginning of the epidemic, HIV among single recruits was higher than that for married recruits, and this continued until 1994. At that time, infection among married recruits reached the same level and then exceeded the prevalence for single recruits. As of 2003, the infection rate among married recruits was almost twice that of single recruits (1% versus 0.47%).

Figure 5: HIV prevalence among army recruits by marital status

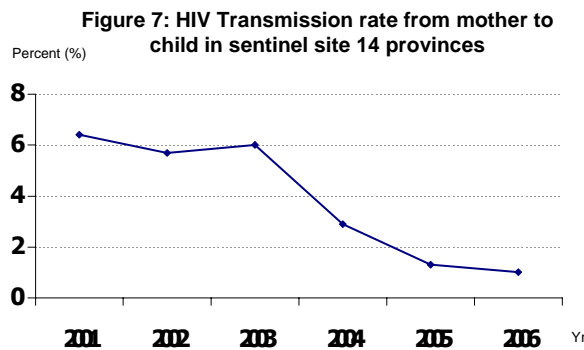


Source: HIV serosurveillance, AFRIMS

Data from the national Red Cross on HIV prevalence among prospective blood donors shows that there have been continuous declines in over time, with prevalence stabilizing at a low level. There are differentials by sex and type of blood donor (first time or repeat). First-time male blood donors had the highest rates and steepest decline, from 1.6% in 1993 to 0.5% in the year 2000. Even though female blood donors have lower HIV prevalence than

men, they show the same differential between first-time and repeat donors, in which the former exceeds the latter by many fold for some years. Also noteworthy is that female first-time blood donors exceed repeat male donors by as much as three times in 2003. These data serve to show that both males and females may believe their risk for HIV may be low, but whether they are at high or low risk of infection depends on certain factors, and this reflects on the spread of HIV in the general population.

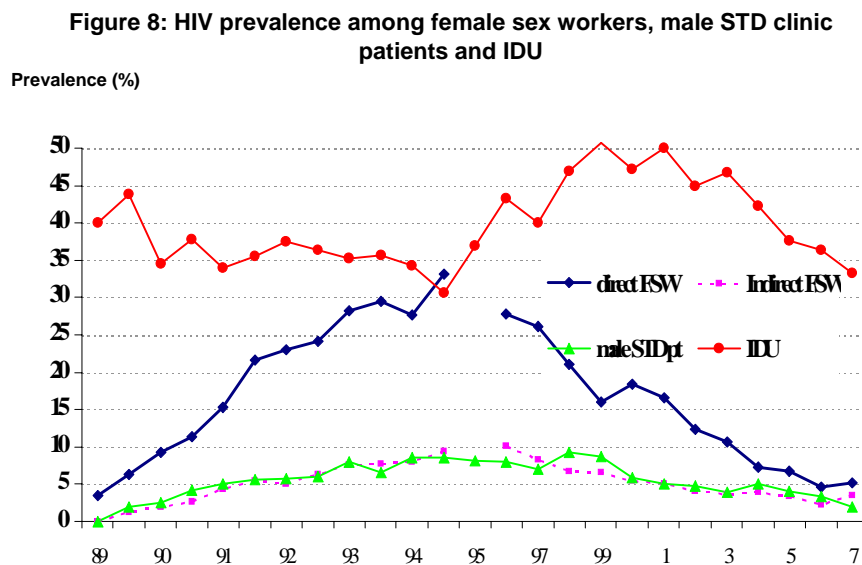
Thailand has implemented a PMTCT program for many years and initiated surveillance of the level of mother-to-child transmission in 14 provinces since 2001. It was found that the rate of vertical transmission was 6.4%, remaining constant until 2004 when there is a sharp decline, reaching a level of 1.3% in 2006. These data attest to the success of Thailand’s PMTCT program for first-born children, and has had a considerable short and long-term impact of vertical transmission.



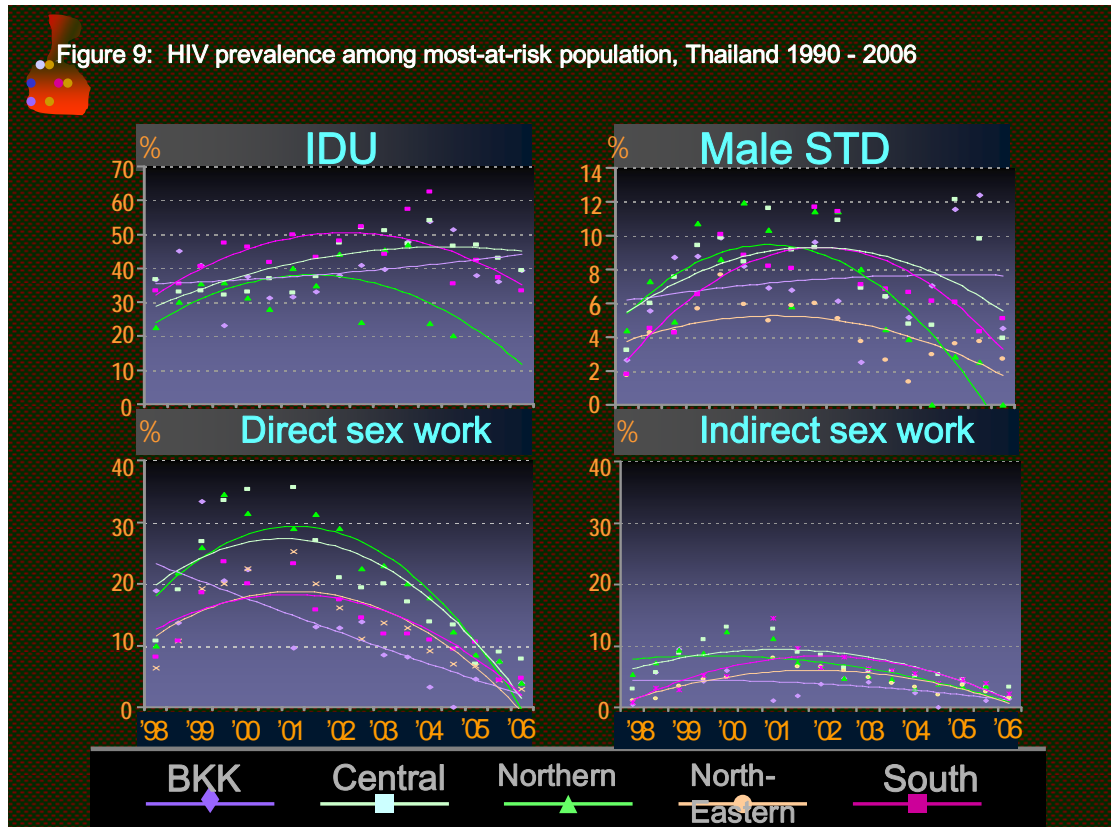
Source: PHOMS, Bureau of Epidemiology

The MOPH has conducted HIV surveillance among those populations with presumed high-risk factors since 1989 to the present including direct and indirect female sex workers, IDU, and male clients of STD clinics. Among groups, IDU had the highest levels of infection, ranging from 30% to 50% between 1989 and 1999, reaching a peak of 50.8%. In the past four years, prevalence has declined to a level of about one-quarter of IDU, but there are pronounced regional differentials. The north has shown the greatest declines, whereas HIV prevalence among IDU in the central region and Bangkok show increasing trends. The south has experienced some declines in IDU prevalence but has stabilized at a rather high level of over 30%.

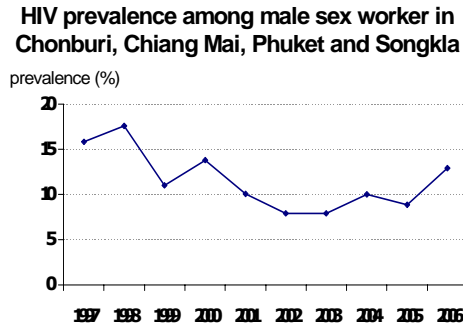
HIV among direct female sex workers shows steady increases until reaching a peak of 33.2% in 1994. Since then, there have been mostly steady declines in prevalence with a slight up-turn to 5.3% in 2007. For indirect female sex workers and male clients at STD clinics HIV prevalence has remained below 10%, increasing slightly until 1995 and then slowly decreasing to 3.5% and 2.0% in 2007. It is noteworthy that, over the last four years of data, the prevalence among direct and indirect sex workers are converging, and that all three groups have declined in all regions, with the sole exception of male STD clinic clients in Bangkok.



Source: HIV serosurveillance, Bureau of Epidemiology

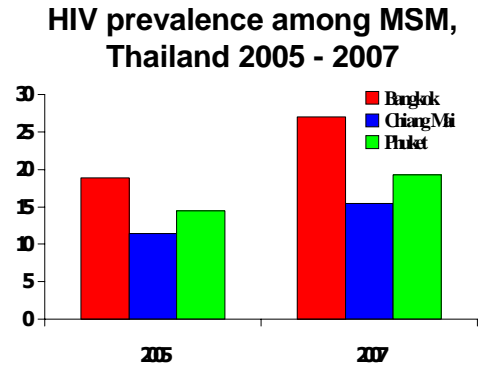


HIV surveillance among male sex workers (MSW) began in 1997. After some decline in the first two years, HIV began to increase, and exceeded 12% by 2006. Ad hoc studies of HIV prevalence among MSM in 2005 and 2007 in Bangkok, Chiang Mai and Phuket found that HIV increased rapidly from 18.9%, 11.4% and 14.4% to 27.0%, 15.5% and 19.3% respectively.



Source: HIV Sero Surveillance, Bureau of Epidemiology

Figure10



Source: Thailand US-CDC, Department of Disease Control, Thai red cross AIDS research center etc.

Figure11

Source: HIV serosurveillance, Bureau of Epidemiology

When examining regional trends of HIV among pregnant women, it can be seen that the greatest improvements have occurred in the north of Thailand, while the southern region shows the least decline and exceeded that for the other regions (except Bangkok) in the last two years. An HIV level among army recruits was initially highest in the upper north, and then converged with other regions by 1999. Since then, HIV in all four geographic regions has remained low at about 0.5%, while in Bangkok, the level of HIV among recruits is 0.9% in 2004.

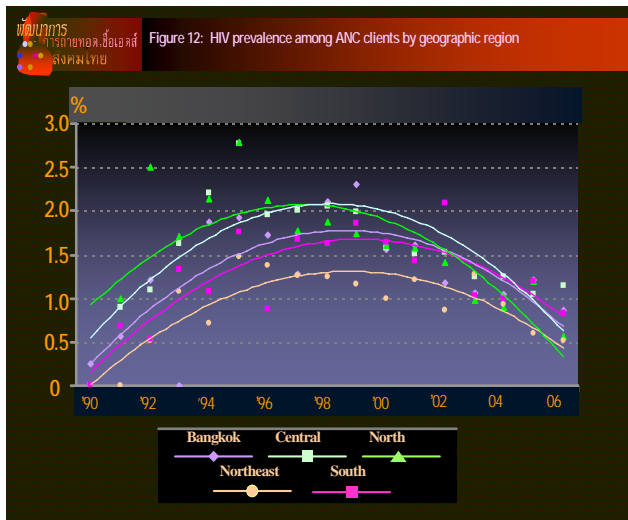


Figure 12: HIV prevalence among ANC clients by geographic region

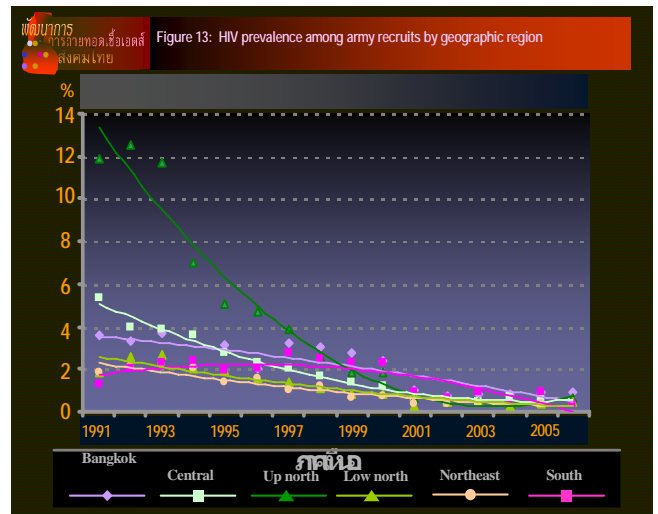


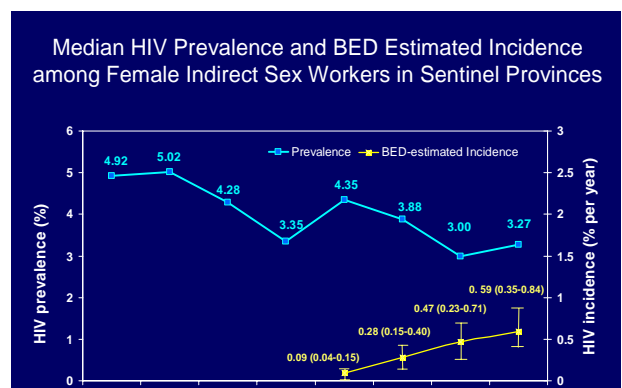
Figure 13: HIV prevalence among army recruits by geographic region

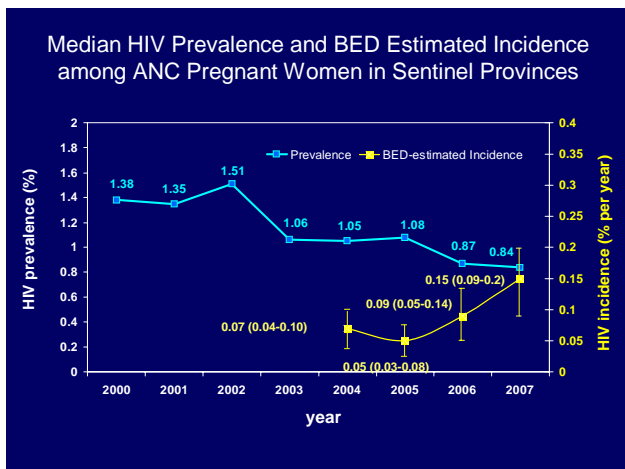
In addition, data from many surveys suggest that HIV infection among vulnerable populations may cross over to the general population if strong intervention programs are not in place. The MSM surveys in 2003 and 2005 show that 22.3% and 17% of survey participants respectively identified themselves as bisexual and reported having sex with both men and women during the past six months. Furthermore, among women newly infected with HIV in 2005, it was estimated that 37% were infected through sexual contact with their male partner, 80% of whom were infected through paid sex. A survey conducted by the Institute of Population and Social Research (IPSR) and SWING (community-based NGO) suggest possible bridging between sex workers and drug users. Of the sex workers who participated in the survey, 46% reported having used drugs during their lifetime, including amphetamines (15.6%) and heroin (1.7%). These networks of risk behaviors can potentially create transmission bridges between vulnerable populations and other populations in Thailand.

In order to more precisely measure incidence of HIV infection, the Medical Sciences Department and AFRIMS, with technical support from the US Centers for Disease Control conducted a pilot study of the BED IGG CAPTURED IMMUNOASSAY (BED-CEIA) among pregnant women and female sex workers in Bangkok and 24 provinces, and army recruits during 2004 to 2007. The results suggest that HIV incidence increased among general population pregnant women and indirect female sex workers.

FIGURE 14

FIGURE 15





In sum, the data from the national HIV surveillance and other ad hoc sero-surveys shows an epidemic pattern that is a combination of generalized and concentrated epidemics. There is evidence of declining prevalence in almost all groups, however prevalence is still high among IDU, and there are indications of increasing prevalence among MSM. Recent studies of incidence provide a warning sign to Thailand that rapid spread of HIV could be returning.

Projections of the AIDS situation for 2007 to 2011.

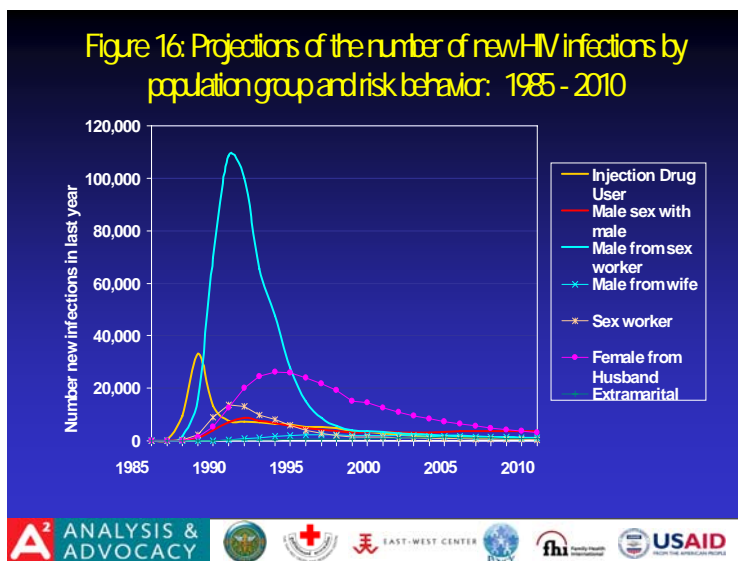
1. Estimates of the number of new infections

Describing the epidemic trends using the Asia Epidemic Model software, draws on baseline data on the epidemic in Thailand since 2000 and has been updated in 2005. The model allows projections backward in time as well as the future. The initial epidemic among IDUs was first detected in 1985 and increased rapidly in 1988. Following that, HIV spread continuously among IDU but not as rapidly perhaps because of the limited number of remaining susceptible in this population.

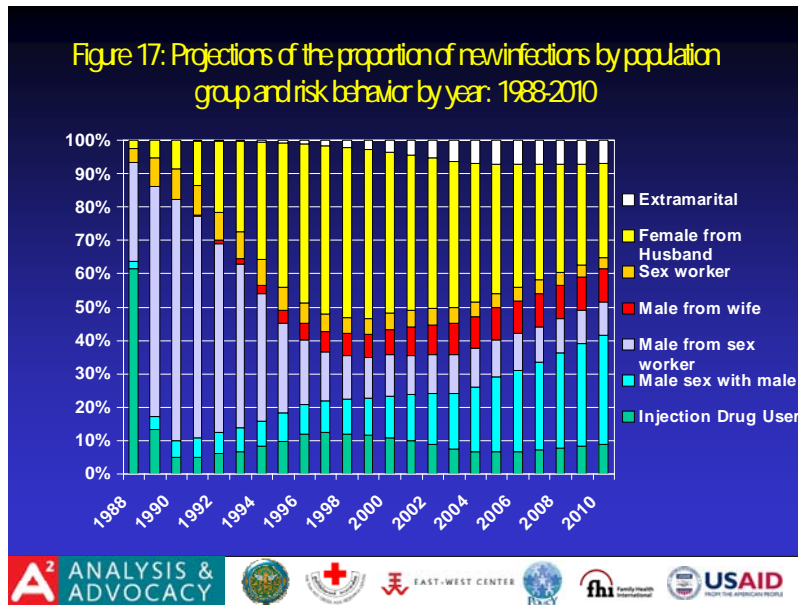
Following the epidemic among IDU, other epidemics were detected among female sex workers and clients of sex a worker, the latter of which represented a large segment of the population, and was distributed widely throughout the country, both in rural and urban areas. The number of new infections in these populations increased rapidly and reached a peak during 1990 – 95. Infection from sex with female sex workers was the most common route of transmission and led to further transmission from male clients of sex workers to wives of these men and to MSM.

The key factors which led to the decline in HIV spread include the 100% condom use campaign in commercial sex establishments, which began in 1992 and contributed to national change in behavioral norms in commercial sex. However, efforts to promote safe behavior in other risk networks was less thorough and, thus, infections have continued to occur in these other transmission networks.

In sum, by using the number of estimated infections, and applying the existing routes of transmission and projecting forward, different strategies of prevention can be compared for effectiveness in reducing new infections. For example, if the level and strategies of prevention as practiced in 2005 were maintained at that level, then the number of new infections would decrease from 13,936 in 2007 to 10,097 in 2011. This would lead to a cumulative number of infections of 546,578 in 2007 with a slight decline to 481,770 by 2011.



From the initial results of the projections, it can be seen that from 2007 to 2011, the number of new infections among women who are infected by their husband or regular partner, and men who are infected from sex with other men increase significantly as a proportion when compared to other sub-populations. These data can inform the strategies and measures for the prevention program to address the current and emerging crisis. Thus, the plans and programs should consider strengthening the prevention emphasis for women who are at risk of being infected by their husband or regular partner and men who have sex with men, in addition to maintaining strong prevention programs for the original risk populations of commercial sex workers, clients and IDU.



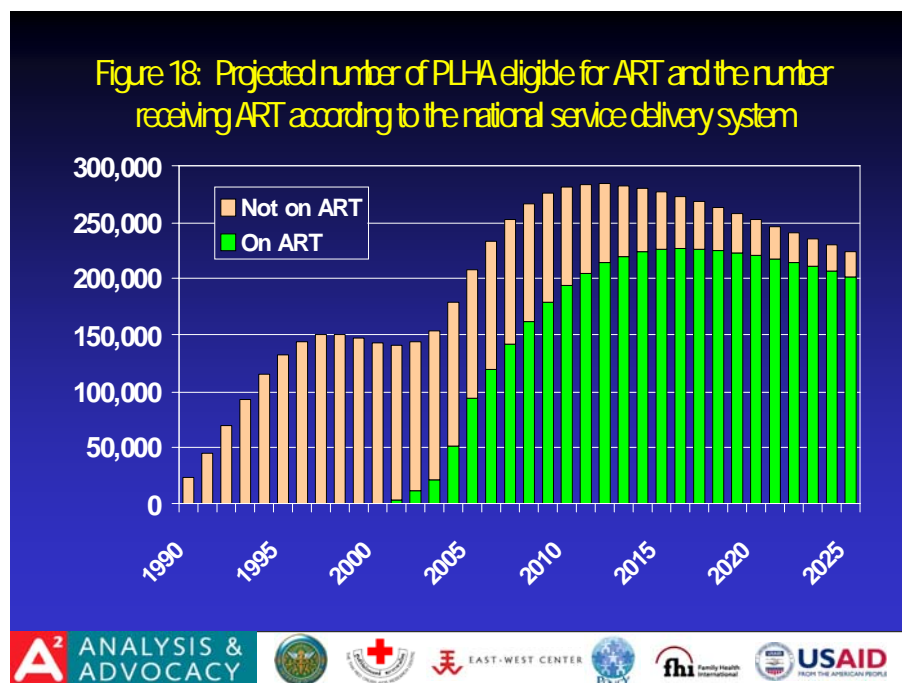
2. Estimating the people in need of ARVs and AIDS mortality

The effect of the expanding AIDS treatment program using combination therapy with budget support from the Thai government through the social welfare program and the Global Fund has enabled at least 100,000 patients to obtain treatment. However, if one examines the projections of number of persons with HIV and AIDS combined with new infections, 51,091 will have progressed to AIDS, and 24,830 will have died of AIDS in 2007 alone. It can be seen that the burden of AIDS treatment needs will continue to increase over time, especially impacting on the elderly family caregivers and infants and children of AIDS-affected families. Therefore, advance planning is needed for human resources, budget and medical supplies and other medical equipment to ensure an adequate level of service delivery. This effort will require a greater level of cooperation between the public and private sectors, civil society and the community to achieve the optimal results.

Table 2 Number of persons infected with HIV, and number of AIDS cases as projected by the Asian Epidemic Model

Projections	Year						
	2005	2006	2007	2008	2009	2010	2011
New cases of HIV	16,51	15,17	13,93	12,78	11,75	10,85	10,097

	3	4	6	7	3	3	
Cumulative number of HIV infections	1,073,518	1,088,692	1,102,628	1,115,415	1,127,168	1,138,020	1,148,117
Number of persons living with AIDS	562,243	556,848	546,578	532,522	516,632	499,324	481,770
Number of new AIDS cases	50,254	50,814	51,091	50,657	49,049	46,272	42,992
Number of deaths from AIDS	18,843	20,797	24,830	26,935	27,680	28,123	27,557
Cumulative number of AIDS deaths	513,268	534,065	558,895	585,830	613,510	641,633	669,191



III National Response to the AIDS Epidemic

1. Administrative Management in HIV/AIDS Prevention and Alleviation

- **National Authority**

Thailand realizes the importance of cooperation of all sectors in the HIV/AIDS response. Consequently, the National AIDS Prevention and Alleviation Committee (NAPAC) was appointed, with the representation of various sectors from the government to civil society. The Committee has been responsible for policy making for the national HIV/AIDS prevention and alleviation plan from 1998 onward.

In 2004, the structure of the Sub-Committee under NAPAC has been adjusted. At the country level, it comprises of 2 Sub-Committee i.e. Program, Budget, Monitoring and Evaluation for HIV/AIDS prevention and alleviation Coordination Sub-Committee and Prevention and Treatment AIDS Vaccine Trial Sub-Committee. At the provincial level, there is a Provincial AIDS Prevention and Alleviation Sub-Committee. The role and responsibility of the Committee and Sub-Committees are as follows: -

The National AIDS Prevention and Alleviation Committee (NAPAC) is chaired by the Prime Minister. The Director General of the Department of Disease Control is the member and secretary. The committee is responsible for making policy, work-plans, measures, control, monitoring and coordination related to HIV/AIDS prevention and alleviation. The National Center for Management of AIDS Prevention and Alleviation is the secretariat.

The Program, Budget, Monitoring and Evaluation for HIV/AIDS prevention and alleviation Coordination Sub-Committee is chaired by the Director-General of the Department of Disease Control. The Director of the Bureau of AIDS, TB and STIs is the member and secretary. The Sub-Committee is responsible for presenting strategies, coordinating, supporting, following up, monitoring and evaluating and developing the information management system for HIV/AIDS prevention and alleviation.

The Prevention and Treatment AIDS Vaccine Trial Sub-Committee is responsible for making policy, standards of research and development on vaccines for HIV/AIDS prevention and care, promoting, following up, refining, investigating the research and development of vaccines for standardization, compiling technical expertise and disseminating research findings to the public.

The Provincial AIDS Prevention and Alleviation Sub-Committee is chaired by the Governor of respective provinces. The Sub-Committee is in charge of direction and policy making, follow up, coordination in provincial HIV/AIDS prevention and alleviation. The

Provincial HIV/AIDS Prevention and Alleviation Operation Center acts as the secretariat.

In 2007, NAPAC has appointed the Sub-Committee for Advanced HIV/AIDS Prevention Program, chaired by Mr. Mechai Viravaidya to accelerate the prevention implementation in parallel with continuation, coverage, efficiency and tracking.

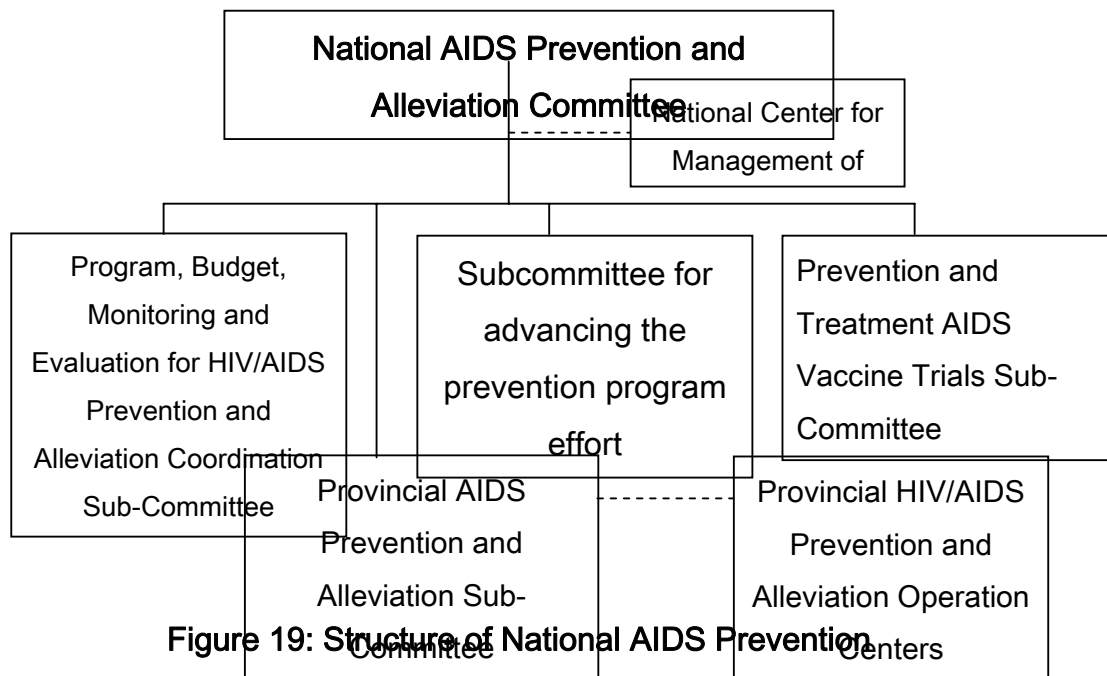


Figure 19: Structure of National AIDS Prevention

▪ **Budgeting system**

In anticipation of the principle of AIDS integration into each agency's implementation, the mechanism of a single AIDS budget allocation done at the Department of Disease Control was changed in 2007. Presently, individual ministries administered their own budget allocation. However, they faced considerable constraints since the governmental administration prioritized indicators based on priorities such as strategies and/or monitoring and evaluation. Furthermore, as the present budget allocation was linked to previous ones, the agencies failed to define AIDS as an indicator or to allocate the budget for AIDS or, in the past, received little to no budget support for this activity. Nevertheless, some governmental agencies have earmarked the AIDS issue and integrated it into the work-plan i.e. Ministry of Social Development and Human Security which defined the master plan covering AIDS intervention.

According to the bureaucracy reform and decentralization to local administration, the budget allocation for AIDS interventions in geographical areas was therefore out of the responsibility of the central

authority, with the exception of treatment and care of PLHA which remains as a specific program under the universal health assurance scheme and social insurance. Moreover, the Department of Disease Control also set aside the budget for condom distribution for STIs prevention in 2006 and 2007 respectively.

In 2007, the total expenditure on HIV/AIDS was 6.728 billion Thai Baht. This is equivalent to 105 Baht per capita per total population, or 11,600 Baht per capita PLHA (given the total number of 580,000 PLHA). The total expenditure on HIV/AIDS accounts for 0.081% of GDP in 2007, or equivalent to 2.7% of Total Health Expenditure (THE).

Regarding source of financing for expenditures on HIV/AIDS, in 2007, it was found that the domestic public shouldered most of the expenditure, or up to 82.7% , whereas international resources contributed to 17.3% . This finding indicates better self-reliance on HIV/AIDS program financing, and the Royal Thai Government's firm commitment to the Program.

In light of the universal access to ART which was adopted by the Royal Thai Government in 2003, the majority was spent on care and treatment, or up to 71.8% , of which ARVs and OI drugs accounted for 92% of this function. This was followed by prevention, at 14.1%, and program administrations, at 9.7%. Annex 3 demonstrates details of expenditures

- **Planning and Follow-Up**

During 2006-2007 the budgeting system had been altered. Instead of a categorized budget, it was a single total budget which was then allocated to each province. As a result, there were no specific targeted areas planned for HIV/AIDS prevention. It was the individual provinces' responsibility to develop the implementation plans based on each ministry's allocation received or the provincial strategic budget. No specific areas were targeted for the implementation plan for treatment and care. Coverage for treatment under the universal health assurance program was provided to PLHA among hospitals, either state or private, that joined the program were engaged in providing services to those registered in the respective hospitals. The hospitals received the budget allocation according to the number of registered patients.

The annual budget supporting civil society organizations for HIV/AIDS response had been reduced from 70 million Baht to 40 million Baht. The budget was under the administrative management of the Department of Disease Control. The amount of budget allocation was considered by the committee in each area comprising government and civil society sectors using the criteria on the magnitude of the problem in the various areas.

Since the planning system has fallen under the management of each province, some areas had therefore no intervention on AIDS. As a

result, the Prime Minister's Office has set forth AIDS as one issue for the Inspector General's office and in the integrated monitoring program to achieve the following:

1. Promote the provincial HIV/AIDS prevention and alleviation sub-committee to coordinate integrated implementation of relevant provincial agencies including the government, local and community sectors;
2. Create understanding and build capacity of the local administration in taking responsibility of local HIV/AIDS prevention and alleviation;
3. Community awareness raising in HIV prevention;
4. HIV Prevention among youths in school at all levels including non formal education centers and educational expansion schools;
5. HIV Prevention among the labor force in the workplaces;
6. Strengthen community education about AIDS that leads to the understanding of the community and social members, which will allow HIV and AIDS patients to get access to the service and live happily in the society.

2. Prevention of AIDS epidemic

2.1 Blood Safety

1. The National Blood Center is the center for blood donation in the country with one third of donated blood of the country. There are 11 national blood service branches while other regional and general hospitals will serve as blood bank for their respective provinces. Guidance for work in blood donation in Thailand is as follows: -

2. Blood donor-General people can be categorized as below: -
 - a) Regular blood donor donate twice a year;
 - b) First time blood donor, new donor;
 - c) Replacement blood donor, in the case that blood was transfused from the blood bank;
 - d) Autologous donor for those who plan for surgery/operation.

3. Blood test Process. The donor received the questionnaire to assess his/her risk behavior. If risk behaviors were identified, the donation will be turned down.

4. Present technique of Anti HIV/Ag is used, added up with 100% NAT.

5. Monitoring of work, all donated blood unit across the country

6. Examination of quality control in blood screening in health facilities all over the country.

Program Results

In 2006, 99.8% of donated blood unit (1,670,596 units) was HIV screened with quality control process. The whole unit comes from service providers for blood donation (blood bank) from across the country. The annual survey of the Blood Donation Center of the same year found that 294 blood donation service units (89%) was quality controlled in screening both in the standard operating procedures and external quality assurance. There was no information as to whether other 36 blood banks had quality control since they were all small community hospitals.

However, the result of blood screening from the Blood Donation Center, Thai Red Cross Society, the country's central agency with almost 30% of blood donation and maintain database of relatively complete service, found HIV prevalence in screening first blood donated groups was higher than regular blood donors in 2006. HIV prevalence in the first blood donated group was 0.31, regular blood donors 0.12%, and in 2007, HIV prevalence in the first blood donated group and regular blood donors were 0.30%, 0.096% respectively with higher prevalence in the first blood donated men than women at 0.45%, 0.18% and 0.43%, 0.30% respectively.

2.2 Prevention of Mother to Child Transmission (PMTCT)

Thailand has been continuously implementing the Prevention of Mother to child transmission. The initiation was on the study program of short-term AZT dosage and weaning. The findings were satisfactorily effective. Hence, the policy on PMTCT was announced in 2000 with integrated into the service system of pregnant women being counseled pre and post voluntary HIV blood test. Antiretroviral treatment (ART) was given during pregnancy to delivery and post partum including ART in infants and mixed milks to compensate breastfeeding. In addition, appropriate counseling, treatment and care services were given continuously.

The special report of civil society on monitoring the national response to the declaration of commitment on UNGASS HIV/AIDS 2001 on sexual and reproductive health related issues in Thailand (Annex 4.2) mentioned that PMTCT policy is a very concrete and effective prevention project of Thailand. The overall policy evaluation is satisfied, particularly in the reduction of mother to child transmission rate. Generally, health service provision is also acceptable.

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Policy on Implementation of Prevention of Mother-to-Child Transmission

- All pregnant women will be treated with voluntary counseling and test (VCT)
- HIV-positive pregnant women will receive antiretroviral drugs (AZT+ Nevirapine) during pregnancy and delivery to reduce mother-to-child transmission.
- Pregnant women will be tested for CD4 during pregnancy and receive ARV, 3 agent formula (AZT+3TC+Nevirapine).
- HIV positive women at post partum will receive ARV ((AZT+ 3TC) to reduce drug resistance incidence.
- Children newly born with HIV positive mothers will receive ARV and mixed milk for feeding including test for immunity against HIV.
- Mother and child and HIV positive husband will be cared appropriately.

In 2004, the Department of Health had additional objectives to include the participation of husband and give ART to mother. The objectives have linked to family care that parents are able to bring up the child at least until at 5 of age. Under the Global Fund supported plan, the government together with civil society provided services which linked to care in the community. Also, the role of local administration was promoted and the direction was sought to create understanding and reduce discrimination in the community.

Program Results (2006-2007)

The Department of Health has supported the establishments across the country to work following the policy on PMTCT. The coverage of services in the program has been consistently increasing. In 2006, the hospital's coverage of VCT to pregnant women was reportedly mounted to 99.6% while infection rate was 0.85%. After the adjustment in number of born babies of the hospitals and of the Bureau of Health Policy and Strategy, Ministry of Public Health, the coverage in receiving ART for PMTCT has been 90.1% and 95.9% in 2006 and 2007 respectively.

According to the hospital report on the follow up to care in children after birth, the number of children at 18-24 months born by HIV positive mother at 3,091 and 2,873 were HIV tested at 68.78% and 54.09% and were HIV positive at 5.83% (124) and 5.79% (90) in 2006 and 2007 respectively.

2.3 HIV Prevention among Reproductive Age Group

The situation of HIV infection in pregnant women from annual HIV infection surveillance discovered that the rate was reducing steadily from 2.29% in 1995 to be 0.76% in 2007. When dividing HIV infection in pregnant women by gravida, it was found that the rate of HIV infection in pregnant women in gravid 1 and 3 tended to be higher, especially the group of age 25-29. The situation of HIV infection in military conscripts reflected the situation of young Thai men of reproductive age at 21-23 that tended to be reducing continuously and was relatively stable from 2003 up to present at 0.4%-0.5%. In addition, HIV prevalence in ex-married groups tended to be higher than single people.

Policy and strategy

Reproductive aged population is one of the key targets for reduced HIV infection. It focused on the married couples or regular partners, aiming at reduced new HIV infection by half of the estimated. To reduce the rate of HIV infection in pregnant women from 0.88% in 2006 to at least 0.5% each year and to reduce the rate of HIV infection in Thai men before conscription from 0.45% in 2006 to be at least 0.5% each year.

The measure for implementing the program in accordance with the policy consisted of Development of VCT for married couple, counseling for disclosure of blood test result, enhanced behavior in HIV prevention and condom use promotion in the antenatal care and other health possible services, tolerance and non-discrimination against women promotion, HIV infected pregnant women, development of service system for HIV prevention in pregnant women

and husband, PMTCT promotion and research and study on HIV/AIDS prevention and alleviation in women and pregnant women.

Implementation

Apart from implementation specifically in youth, implementation in reproductive age focused on the part of reproductive age services, seek ways to promote the participation of husbands and wives in HIV prevention. In 2006, the Department of Health developed services appropriate to HIV prevention in pregnant women and husband with the services consonant with the areas.

The development of service system to have the participation of husband in ANC helped find the couples in which husbands were HIV positive while wives were negative. It gave the opportunity to better help and prevent pregnant women and their babies from HIV infection by continued counseling and counseling for disclosure of blood result to promote safe sex behaviors.

Behaviour

The result of National Sexual Behavioural Survey of Thailand, 2006 discovered reproductive age of 18-49 years to have sexual intercourse with multiple partners in the last 12 months at 9.4%. It was men who had **with more risks at 17.9%** and women at only 0.95%. However, condom use in the last sexual intercourse was used 50.9% which women took more risks by using condom only at 14.3% while men at 52.9%

2.4 HIV Prevention among Youth

According to the situation of 2007 HIV infection surveillance of pregnant women aged 15-24 represented group of women age 15-49 (Bureau of Epidemiology), it was found HIV infection at 0.64% and the prevalence in age 20-24 was higher than age 15-19 (0.74%, 0.50%). From monitoring of awareness raising on AIDS in youth by the National Sexual Behavioral Survey of Thailand in 2006, surveyed on population of age 18-49, it was found that male and female youth at 15-24 who gave correct answers concerning HIV prevention in sex intercourse and disagreed with misconceptions about AIDS. Those who answered 5 questions correctly were only 39.5%, broken down by male at 47% and female at 2.3%. Besides, the survey also provided information on sexual behavior at the first time of youth both male before age 15 at 13.40%, the rate was higher in male than female at 21.40% and 5.40% respectively. It was found more in age 15-19 than age 20-24 at 16.40% and 12.20%

Sexual intercourse with more than single partner in the last 12 months in group 15-49 of age was found in male than female (17.9% and 0.95%) in which age 18-19 was found the most at 23.6% and 20-24 at 17.50% and the least was 25-49 years at 7.20%. Besides, the condom use behavior in the last sexual intercourse with more than one partner was reported only 50.9% in which male used at 52.9% (199) more than female which used only 14.3% (3). Condom use in the last sexual intercourse was

found most in group of age 15-19 at 63.4% (26) while condom was equally used age 20-24 and 25-49 at 48.60% and 49.8% respectively.

Implementation

1. National prevention plan in youth was supported by the Global Fund and was implemented by the government and NGOs in youth in schools, workplaces and community. The program was run by 6 agencies covered all regions of Thailand. The main knowledge process was two curricula i.e. sex education and AIDS communication.

Youth in school: with the capacity building of the teachers and AIDS and sex education implementers including development of the participation of youth in decision making and running HIV/AIDS prevention. It was aimed to that sex education was taught in the secondary and vocational schools at 16 periods/academic year. Apart from this, promotional social environment that helped communication about AIDS and sex in the family and community, by campaigning and public relation on AIDS for youth in education places at national, provincial, local and community levels.

Youth in the community: The content of work was to raise the awareness on AIDS through communication process about AIDS that was conducive to the social and cultural contexts in each area. Youth leaders were developed capacity in organizing the activities, information center, learning friendly center. Capacity was built to local administration in policy making and AIDS planning for youth in the community.

Youth in the workplaces: Policy on implementation and the standards assessment on AIDS in the workplace namely AIDS Response Standard Organization (ASO-Thailand). The leaders were trained for role play in activities on AIDS awareness including VCT by referral to the hospitals.

Life skills education was organized, applying the curriculum of Ministry of Education.

AIDS awareness and education were organized for youth in the judicial proceedings and corrections home.

Development of referral system: To have youth access in health service and material/equipment in AIDS/STDs prevention. Development of quality care system to support youth, health and social personnel in the educational places, youth friendly support and assistance, condom sale and/or distribution.

Organization and promotion of social environment to contribute to communication on AIDS and sex for youth in the educational

places, community at national, provincial, local and community levels. Promotion of media role in communication on AIDS and promotion of role of parent association in AIDS communication.

2.5 HIV Prevention among Most-at-risk Population

2.5.1 Male/Female Sex Workers

After IDU, the HIV prevalence among sex workers (female and male) has reached some of the highest levels in the surveillance system. At the same time, the decline in prevalence among female sex workers has been remarkable, while trends in male sex workers may be on the rise again. Thailand started a system for prevention and control of STIs since 1951. This network of clinics greatly facilitated the collection of data and provision of prevention services when HIV began to spread rapidly through sex in 1989. Before the AIDS epidemic, the services for SWs at these clinics originally included regular check-ups, cultures for gonorrhea, presumptive treatment, prevention education and condom distribution. Screening for syphilis occurred on a quarterly basis was added later. Since the beginning of the HIV epidemic, screening for HIV occurs when new episodes of STDs are detected and during periodic sentinel surveillance.

The most important program for sex workers in Thailand was the structural intervention to promote 100% condom use in commercial sex establishments. More than anything else, this policy helped to empower sex workers to negotiate aggressively with clients to use condoms. This policy and program served to reinforce the need for male behavioral norm changes nationwide, and was largely successful in achieving this. Data from numerous sources confirmed the dramatic increase in condom use during commercial sex in the early 1990's, followed by precipitous declines in curable STDs through public and private clinics, and ultimately declines in HIV incidence in the population of sex workers and clients of sex workers. The Thai national program also aggressively increased its coverage of STD screening and treatment by introducing 2nd and 3rd generation antibiotics and state-of-the art diagnostics for STDs (and HIV) for use with sex workers.

Over the years, civil society programs worked hard to provide economic alternatives to women so that they would not have to resort to commercial sex to support family income; but these programs had a mixed record of success. The large amount of money that can be earned by those with little education or skills via sex work creates enormous pressure on low-income families not to resist their children's understandable sacrifice when urgent family needs arise.

Programs for male sex workers did not achieve the same degree of coverage as for female sex workers perhaps because MSM accessed commercial sex in non-establishment locales (such as parks, public toilets, and other MSM cruising locations). Thus, while HIV among female commercial sex workers has remained low, there has been documentation of a resurgence of HIV among male sex workers and MSM in the current decade. The lesson for Thailand is that rapid

spread of HIV can return with a vengeance at any time unless and until safe sex becomes a permanent norm.

2.5.2 Men having sex with Men (MSM)

The 2007 survey of the Bureau of Epidemiology revealed HIV prevalence in MSM is high at 24.6%. According to TUC study in Bangkok Metropolitan, the HIV prevalence of men having sex with men in public parks has been speedily increased from 17.3% in 2003 to 28.3% and 30.7% in 2005 and 2007 respectively. In the cases of street-based male sex workers, the HIV prevalence was up to 36.2% in 2007.

2006-2007 Policy and Plan/Program

The National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation, and Universal Access Plan on HIV/AIDS Prevention and Alleviation Implementation (2007-2011) identified MSM As one of the key targets of implementation.

There were implementation plan at local level in some areas where the trend of challenges was high, e.g. the 4th HIV/AIDS prevention and alleviation in Bangkok Metropolitan (2007-2011), intervention on AIDS in MSM in Chonburi program.

The MSM groups and the network of sexual diversity in Thailand have set up the interventions to reduce new HIV infection in 2007-2008, based on the Universal Access Plan on HIV/AIDS Prevention and Alleviation Implementation (2007-2011).

The plan/program was mainly supported by international organizations. It was the support on network of sexual diversity work to establish peer educators and drop-in centers. As for the government sector, there was a development of specific service system that is client-friendly and also made links to the network's working.

The initiation of joint work between the network and the Bureau of Epidemiology was started by a survey on HIV prevalence in MSM which was entered to the national surveillance.

Program Results

Regardless of the result of a 2007 survey on knowledge of MSM in which the proportion of correct answers was low i.e. 5 correct answers at 25.3%, the proportion of group of age over 25 had more correct answers at 30.4% while the group of age under 25 had all 5 correct answers at 20.6%, the behavioral surveillance in MSM of Bureau of Epidemiology revealed that condom use in anal sex with male partners was high to 89.9% in which the group of over 25 of age reported high condom use at 97.5%. However, the survey in Bangkok

reported that consistent condom use in the last three months before the survey was 65.8% in 2007 and anal sex in the last three months before the survey was slowly reducing from 97.9% in 2003 to 87.5% in 2007.

With regard to the 2007 behavioral surveillance in male sex workers, 91.3% reported condom use in sexual intercourse with the last clients, but 87.8% reported condom use in sexual intercourse with regular partners which was in line with the information of MSM network that MSM stopped condom use when they have trust which occurred after a certain period of living together.

2.5.3 Injecting Drug Users (IDU)

Meanwhile the overall prevalence rates of HIV infection in Thailand has significantly decreased, the prevalence rate of IDUs under the sentinel sero-surveillance stays consistently high between 30-50% until 1999 which has slowly declined to 27.8% in 2007.

Harm Reduction

The prevention work among IDUs is extremely inadequate with limited coverage. There was an effort to push forward the work by establishing the accelerating working group, comprised of various sectors, for reduced HIV epidemic in IDU in late 2002. There are two sets of implementation plans on Harm Reduction being designed for 2004-2005 and 2006-2007.

The implementation was rather the program financially supported by the international organizations than service plan. With the effort of the Department of Medical Services represented by Thanyarak Institute, Methadone Maintenance Therapy (MMT) service was highlighted, however, with some restrictions of budgeting regulations to support the service unit in 2006. A harm reduction curriculum was developed through collaboration between the Medical Services Department and the Department for Disease Control and the IDU collaboration network under the working group mechanism for accelerated reduction of HIV among IDU. Two national seminars on harm reduction were convened, one each in 2006 and 2007. The staff involved with services for IDU learned about new approaches and developed positive attitudes capacity for their work. A handbook for MMT was distributed along with a guidance document on VCT for IDU. Other documents and resources included a comprehensive handbook for working with IDU, Pathway to Recovery, a Detox handbook, a harm reduction training curriculum, and a manual on techniques for outreach to IDU. Several NGOs tried to have the IDU get access to the service in the form of outreach program by peers, drop-in centers. There was an attempt tofor the policy since Thailand has no significant policy on harm reduction which caused the intervention in prevention on HIV epidemic in IDU to be delayed.

Knowledge and Behaviour

Surprisingly, the result of the behavioral surveillance in 2007 discovered 49.1% of IDU answered correctly to 5 questions on AIDS, which was higher than other most-at-risk groups e.g. SW, MSM. There was possibility that they are hard-to-reach populations, the sample might be those who used to answer these questions.

The Mid-term review of the National Plan for HIV and AIDS Prevention and Alleviation for 2002-2006 found that HIV positive IDU had better knowledge about HIV/AIDS than the IDU who was HIV tested and the IDU who was never tested. The review reflected the knowledge on HIV/AIDS is accessible by the IDU was in a too slow process.

2.5.4 Migrants

Situational analysis

The number of foreign migrants in Thailand is currently estimated at 2 million and only about 30% are documented. Undocumented migrant workers are most vulnerable to health hazards and communicable diseases because of the lack of affordable health care services. The Royal Thai Government has limited resources to assist the migrant population and is not able to fully meet their socio-economic needs

The conditions in which many migrants live could seriously induce various health hazards and illnesses due to lack of hygiene, clean water supply and standard waste management. Living in clustered areas in fishing boats and living quarters could increase the chance of contracting many communicable diseases such as TB. Their educational background often lead to risky sexual behaviour and lack of understanding of safe sexual practices, which has lead to low usage of condoms among the workers and their communities.

National policy and response

The migrant population has been integrated into the National AIDS Control program since 2005. The migrant health strategy has been a joint effort between the government and civil society to establish a budget allocation, health system and the legal permission to provide health care to all migrant populations and to create a sustainable program at the national level. The strategy includes the 4 aspects of public health approach (health promotion, prevention, treatment and care), the universal access to health, the community and target group participation, the management system and

budget allocation. The third policy related to HIV interventions among migrants is that the government has recently signed the agreement for the border health program on 11 December 2007. The target of the border health program is everyone who lives along the Thai border including the Thais, migrants, stateless people, ethnic minorities, and the refugees. The border health program covers all aspects of health care including communicable diseases such as HIV and AIDS interventions. Border surveillance and access to care are also parts of the program.

3. Treatment, care and support for People living with HIV/AIDS and affected families

Antiretroviral Treatment

The government's will to provide insurance scheme for PLHA to get access to antiretroviral treatment as well as put ART into the universal coverage of health insurance in 2005, resulting many more Thai PLHAs had the opportunity to get access to ARV. Besides the universal health insurance system, the PLHA in the social security system and civil servant's welfare also received the coverage despite some contradictory practice. Mainly, it was the universal health insurance system that being used by PLHA. According to the inquiries, the drug companies and medical doctors in charge suggested there be 10,000 PLHA who received ART in private hospitals.

As of September 30, 2006 and 2007, numbers of PLHA under the antiretroviral treatment reached 95,620 and 133,539 persons respectively. The estimation of coverage of PLHA who should receive ARV, according to Thailand standards it also included symptomatic and asymptomatic patients with CD4 level lower than 200 cell/cu.mm. applied by the estimation of Thai Working Group under the coordination of the Analysis and Advocacy (A²) project, the coverage was found to be 41.0% and 52.9% respectively. If only the coverage in symptomatic specific was applied, the coverage was 69.8% and 84.8%.

In this report, it was the coverage specifically for the infected adults. However, children under treatment as of September 30, 2006 and 2007 were at 5,459 and 6,687 persons respectively.

Monitoring of preparedness in service system in ART in Thailand, it was discovered that there were 1,066 health facilities across the country were well-prepared in ART.

Access to Care

HIV Counseling and Testing is the entry point of access to care. According to the 2006 National Sexual Behavioural Survey of Thailand, it was found that general population, age 18-49 both men and women who were HIV tested and knew the result in the last 12 months were 19.1%. The percentage on women being HIV tested

and knew the result was more at 21.8% while men were tested and knew the result was at 16.3%. Partly, women were tested at the ante-natal care (ANC).

Among most-at-risk populations, according to the behavioural surveillance, FSW, MSW and MSM had more exposure to HIV who were tested and knew the result in the last 12 months were at 52.4% 54.2% and 34.9% respectively.

In 2007, the national health security office has developed the database of PLHA since their being tested and found infected. This information would enable the future monitoring as to how many PLHAs entered the care system. In the meantime, the service system for asymptomatic persons was also required for development.

Drug Resistance Surveillance

The care network nationwide reported drug-resistant patients and the situation of drug resistance from the evaluation of NAPHA program in 2004-2006. It was found the treatment failure at 0.12 per 100 persons per month in adults. Several studies in PLHA who never entered treatment, the treatment failure rate was approximately 12%

Quality of Life of PLHA

The assessment of survival of the patients after ART for 12 months, the rate of survival of the patients started to be treated by ARV during October 1, 2005-September 30, 2006, 84.9% was still alive after 12 months of treatment.

Following the evaluation of the National Access to Antiretroviral Program for PHA (NAPHA) program and the improvement of access to treatment and care of PLHA and antiretroviral treatment (supported by Global Fund), the study of quality of life of PLHA after receiving ARV revealed that the PLHA felt satisfaction, contented and had courage to struggle because of the good results. The quality of life of those treated by ART was better improved than those without ART and living was more meaningful. They could live with the community with hope and future plan.

Opportunistic Infections (OI) Prophylaxis and Treatment

As with the antiretroviral treatment, prevention and treatment of OI is also part of the coverage of the universal health insurance system, social insurance and civil servant's welfare.

As per the evaluation of quality treatment in all 106 affiliated hospitals, numbers of PLHA clients as randomly estimated were 11,699 persons. 87% of the infected adults in the treatment registration received CTX for preventing PCP and 82% for infected children.

Development of TB/HIV Treatment Service System

Tuberculosis is an opportunistic disease found the most in the OI group affected to PLHA. The Bureau of AIDS, Tuberculosis and STIs has developed the service system, focusing on the coordination for treatment and care in PLHA between Tuberculosis and ARV clinics. Trainings on VCT were organized to the service providers at the Tuberculosis clinic.

Evaluation of the coverage of TB/HIV treatment in 2006, using the estimation base for TB incidence 142/100,000 population and HIV positive rate among TB patient at 7.6%. 32.6% of TB/HIV patients being TB and ARV treated.

Policy and project plans for support of AIDS-affected children in 2006-2007

Thailand does not yet have complete data on the number of children infected with HIV and those who are adversely affected by AIDS. This lack of data makes it difficult to estimate the extent and gaps in coverage of current services. But it is known that, for children whose HIV status is known, they do receive care and treatment because of the free treatment program of the government. The policies of the Ministry of Social Development, along with the support of other related organizations have helped to create a service network among hospitals, NGOs, networks of PLHA and community organizations. But it is known that there are a large number of children who are not accessing the care and treatment they need including children who live in remote areas, children from poor families, out-of-school youth, children whose parents do not know their own (HIV+) sero-status, children who know their status but are afraid to come for services due to social stigma and discrimination from government officials, children who may not be eligible for treatment due to lack of a national ID number, children of minority groups, street children, children of migrant laborers or refugees.

4. Vaccine development

Thailand has appointed the Technical Sub-Committee under the AIDS Prevention and Control Coordination Committee in 1989 in order to monitor the direction of medication development and AIDS vaccines, since the beginning of these studies. To address the AIDS epidemic mainly found in developing countries, the World Health Organization (WHO) set a policy to accelerate the capacity building in AIDS vaccine trials in the developing countries. Thailand was one among the 4 selected countries of WHO to be a country suitable to support AIDS vaccine development. Thailand then set up the plan for AIDS vaccine trials since 1993. The AIDS vaccine trial phase 1 was started the same year. It was later discovered that over 90% of the strain of HIV in the country's epidemic is (CRF_01 AE) or called Type E in general. This type is different from

other types spreading widely in other parts of the world. Thailand as such sought its own management of the AIDS vaccine trial, given that, in so doing, the vaccine company would produce the AIDS vaccines of suitable type, specific to the type of virus spreading in Thailand .

After the AIDS vaccine trial had been in progress for some time, the vaccine was found to meet the standards, and the trial entered phase 3. The Department of Disease Control in association with Faculty of Tropical Medicines, Mahidol University and Armed Forces Research Institute of Medical Sciences, the Royal Thai Army Medical Department were put in charge of the AIDS vaccine study program Phase 3. It is the largest trial of the world, studying 16,000 volunteers in Rayong and Chonburi Provinces, with study duration of 2003 to 2009.

Community Advisory Board (CAB)

The AIDS vaccine trial study program Phase 3 gives value to the participation of the community. The research team worked with AIDS NGOs to gain the full understanding of the community, and also sought opinion leaders in the two provinces to help form the Community Advisory Board (CAB) responsible for consultation to both researchers and local people for the understanding of AIDS and AIDS vaccine development. The CAB consisted of representatives of the local administration, representatives of volunteers in the AIDS vaccine study, representatives of labor union, retired civil servants, experts, networks of people living with HIV/AIDS, academics, health volunteers, local health service providers and representatives of researchers. The total number of the board is 26 persons, convening bimonthly meetings which enhance the capacity of the board in knowledge, understanding, role and responsibilities, and provides useful recommendations/suggestions to research work and the community itself.

Progress of the Study

16,000 volunteers joined the trial study and the results are expected to be concluded in 2009. The study process was reviewed and approved by the committee board regarding data and safety of the research. Regularly, the meeting of the CAB was held and the latest was held in July 2007. The board has concluded that there are no concerns about safety and volunteers, and that the quality and progress of the study were good.

In addition, Thailand's AIDS vaccine trial study program Phase 3 is a test for the effectiveness of AIDS vaccine trial in the last stage prior to the utilization. It is considered to be the only farthest-moving program of its kind in the world. It has drawn the interest of scientists all over the world who have been awaiting the study results. All researchers are expecting that AIDS vaccine be a reinforcing measure for AIDS prevention and control in parallel with

the existing effective measures. See more information in:
www.primeboost3.org

IV Best Practices

As per the discussion, the consensus among the working groups of this report writing was to collect the aspects of implementation that deserved to be recorded in the report as best practices and/or ones that lead to the process of knowledge management internally and externally. In addition, they will be used as the basis for continued development in the following dimensions: -

Supportive policy environment: ASO Scheme: HIV/AIDS Prevention and Management in the Workplace

The Department of Labour Protection and Welfare (DLPW), Ministry of Labour (MOL) has recognized that HIV/AIDS remains as a negative impact on business performance in Thailand and on workers' rights.

At present, 7 million people in Asia are living with HIV/AIDS. One-half million of these people live in Thailand. Annually, more than 10,000 people get newly infected with HIV/AIDS in Thailand. About 80% of these people living with HIV/AIDS are between the ages of 20 and 39. The majority of cases were reported among the labor force sector, of which 46.6% (general laborers, industry employees, and truck drivers) are the most productive segments of the society. It was also reported that more than 80% of infections among this group is through heterosexual routes.

- ***Enhancing HIV/AIDS in the Workplace***

HIV/AIDS is not only a health issue but also a workplace issue. The protection of workers' rights in the context of HIV/AIDS remains a challenge in Thailand (e.g. compulsory HIV testing in job recruitment and for employees; unequal treatment in employment for people with HIV; and breaches of confidentiality). The DLPW recognizes that people with HIV can be productive employees. They are no threat to colleagues' health. Beliefs that non-discrimination and compassion are the effective mechanisms against HIV/AIDS in the workplaces need to be universal. With the strong efforts between DLPW, the International Labour Organization (ILO) and the non-government organizations - the Thailand Business Coalition on AIDS (TBCA) and the Center for AIDS Right (CAR) carried out the project on Developing a Model on HIV/AIDS Prevention and Management in Workplaces: Outreach to Factories in Rayong Province in 2003. It is a fruitful and supportive project. The project has the aim to achieve its objectives by using a quality certification scheme called the **AIDS-Response Standard Organization (ASO)** in which the public recognition and the minimum standards of responding to HIV/AIDS are made acceptable.

- ***National Response***

At the high level, the DLPW, on behalf of the MOL, in cooperation with the ILO, employer organizations, employee organizations, non-governmental organizations, networks of people living with HIV/AIDS, relevant government agencies, and educational institutions finalized the MOL's Code of Practice on Prevention and Management of HIV/AIDS in the Workplace and ASO Thailand. It is one of the mechanisms designed to protect workers' rights. It's also helpful to the companies to mitigate the adverse effects of HIV/AIDS. Through policy guidance and technical advisory services, the Code guides employers, workers and the government

agencies how to prevent HIV/AIDS among workers and how to ensure that workers living with HIV are not discriminated. In this regard, the common understanding of behavior in the workplace is recommended as follows;

1. design the guidelines on the prevention and management of HIV/AIDS in the workplace adopted and used by government officials, employees and specialized organizations voluntarily in order to develop and implement the appropriate and effective policies and strategies,
2. promote dialogue and negotiation forums leading to better cooperation among agencies concerned, including the public sector, employers, employees, and people infected or affected with HIV/AIDS, community leaders and non-governmental organizations (NGOs),
3. provide a framework for the AIDS Response Standard Organization (ASO) Certification scheme for interested establishments.

The mechanisms and tools developed by this project, which ended in August 2004, have been applied and scaled up at the national level, and implemented by the Department of Labour Protection and Welfare (DLPW), the Department of Disease Control, Ministry of Public Health and Thailand Business Coalition on AIDS (TBCA) under the project “HIV/AIDS Prevention and Management in Workplaces”. This implementation technically and financially has been supported by Global Fund to fight AIDS Tuberculosis and Malaria (GFATM) from 2004 to 2008.

- ***The Results of implementation of the HIV/AIDS Prevention and Management in the Workplace Project***

As surveyed by TBCA (in 2007), the model showed the effectiveness and feedback of the HIV/AIDS prevention and management in the workplace process as follows:

1. 98.5 % of the workers and the management are satisfied with HIV/AIDS education program provided from the project
2. Attitudes, behaviors, activities and policy on HIV/AIDS in the workplaces changed in a positive way as described in the table below:

Table 3: Pre- Post -Survey on HIV/AIDS activities of the workplaces

HIV/AIDS Activities	Pre-Survey	Post Survey
Care and Support of HIV infected workers	14.7 %	98.7 %
Promote Condom use	15.1 %	97.2 %

HIV/AIDS activity Campaign	9.0 %	96.4 %
Joint HIV/AIDS activities with other partners	5.9 %	94.0 %
AIDS Volunteers in the workplace conduct activates	1.9 %	89.6 %

Table 4: Attitude Change on HIV/AIDS of workers

Attitude on HIV/AIDS	Baseline (n = 10,000)	Year 2 (n = 16,861)	Year 3 (n = 31,896)
Can work in the same room	89.7 %	98.8 %	98.8 %
Can use the same telephone	80.5 %	98.0 %	97.8 %
Can use the same toilets	68.6 %	97.1 %	97.0 %
Can eat together	40.2 %	93.7 %	93.0 %
Can touch HIV infected co-workers	72.9 %	93.1 %	93.4 %
Can take care HIV infected co-workers when get illness	71.1 %	91.8 %	93.9 %

Table 5: Behavior Change on HIV/AIDS of the Workers

	Baseline	Result
HIV Voluntary Blood testing	3.17 % (n=16,111)	16.20 % (n=15,214)
Consistent condom use with casual partner, girl-boy friend	21 % (n=6,447)	Year 1 = 34.0 % Year 2 = 48.6 %

Table 6: The Workplace Policy on HIV/AIDS Prevention and Management

Workplace Policy	Baseline (n=2,169)	After year I (n=2,045)	After year II (n=1,703)	After year III (n=2,013)
No compulsory pre-employment HIV testing	89 %	94 %	96 %	96 %
No compulsory HIV testing of employees	89 %	95 %	97 %	98 %
No termination based on HIV/AIDS	47 %	72 %	81 %	76 %
Termination of HIV positive status	5 %	3 %	0.7 %	0.7 %
Providing HIV/AIDS Education	34 %	91 %	96 %	93 %

The ASO-Thailand is able to prevent and manage HIV/AIDS in the workplace. The ASO Thailand is an effective tool for human resource management standards. It is in line with the ILO Code of Practice and

international business standards. The ASO-Thailand will also be a subset of the upcoming ISO 26000, under its corporate social responsibility and human rights section. This program so far has directly reached 230,000 employees with 4,118 workplaces achieving ASO quality Certification.

- **Lessons Learned**
 - International systems; the ILO, Global Fund, UNAIDS are essential supportive agencies to advocate national policy.
 - Networking and partnership with governments and NGOs, is the key to success.

- **Challenges Ahead**
 - National policy and national mechanisms are needed to recognize HIV/AIDS as a workplace issue.
 - HIV/ AIDS and TB co-infection is needed to be recognized as an occupational safety and health issue.
 - Addressing HIV/AIDS guidelines and the ASO scheme in the upcoming ISO 26000: Social Responsibility
 - Develop ASEAN HIV/AIDS in the workplace guidelines and addressing the ASO Scheme as one of the tools.
 - Promote and implement 'ASO' in ASEAN and APEC member countries.
 - Promote business coalitions on AIDS among ASEAN and APEC member countries
 - Collect and distribute best practices on HIV/AIDS prevention and management in the workplace in both government and business sectors among member countries
 - Sharing experiences among ASEAN and APEC member countries

Scale-up effective prevention programs

Prevention of Mother to Child Transmission of HIV in Thailand

- **Background**

From sentinel surveillance of HIV infection, the prevalence rate of HIV infected pregnant women was first reported in 1991, which was 0.6. Since then the prevalence rate was increase continuously each year until the highest rate in 1996 which was 2.29.

The PMTCT program in Thailand started in 1998 after the study of Pediatric AIDS Clinical Trials Group (ACTG) 076 was reported. Thai MOPH and US- CDC coordinated on conducting the study of ARV for Prevention of Mother to child transmission of HIV called Bangkok Study. After the reported of Bangkok study, the MOPH started the operational research to

study the feasibility of PMTCT services in 2 regions, regions 10 in Northern Province which has the high prevalence of HIV infected and in regions 7 in northeastern province which has the low prevalence of HIV. The 2 research were successfully implemented.

- ***Prevention of Mother to Child Transmission of HIV program in Thailand***

After the Bangkok study and PMTCT study in 2 regions, the Department of Health, MOPH started the national PMTCT program. The national program on Prevention of Mother to child transmission of HIV (PMTCT) has been initiated nationwide since 1999. The program has aim to provide PMTCT services to all pregnant women who come for anti-natal care at the health care facilities. The PMTCT services was integrated into maternal and child health services. The services include; voluntary counseling and testing for HIV with confidential, ARV drug for HIV positive pregnant women during pregnancy start from 28th week gestation until delivery, after delivery within 48 hours her child will receives ARV drug for 7 days or 1 months depend on the duration of ARV which her mothers received. The program also has the policy for the HIV positive mothers not to breastfeed their children but to bottle-feed with formula. The formula will be provided to the children by the government for free. All the mothers, their children will receive care and support continuously.

- ***PMTCT Monitoring System***

After the PMTCT policy, the DOH develops and set up the monitoring system called “Perinatal HIV intervention monitoring system” or PHIMS. All health facilities should report the PMTCT services result every months. The report will be sent to the 75 provincial health offices (PHO). The PHO will add on the reports from the hospitals and sent to 12 regional health promotion office which under the DOH organization. Then, they will send to DOH for country level report. The DOH will analyze and report for the country report.

The regular meeting with the responsible persons from 75 provincial health offices and 12 regional health centers will be held at least once a year to discuss the problem and find the solution for better services. Supervision has been done at each level continuously.

- ***Outcome and Challenge***

Since then, there are 939 health facilities all over the country which provide PMTCT services. From 2002 – 2007, the PMTCT reporting system showed that there are 3,443,188 pregnant women were delivered in the hospitals, 3,412,790 cases (99.1 %) received counseling and testing for HIV, 31,181 cases (0.9 %) infected, 27,503 cases (88.2 %)received ARV for PMTCT, 28,841 children born to HIV positive mothers received ARV and formula for replacement feeding. There are estimated of 5,865 children can be prevented from HIV infected. PMTCT report in 2007 stated that the transmission rate was 5.79 %. The MOPH has the PMTCT target plan to reduce HIV transmission rate to 4 % by the end of 2009.

- **Program Lesson learned**

Success of the program

The success of the program is the program continuous and scale up. These come from integrating the program activities into routine maternal and child health services system, the support from the administrator's level, the support of the resource need from the central level, and also as the health personnel themselves.

From PMTCT service receivers' point of views; they stated that overall care service quality perceived is in good impression. They feel confidence in treatment and confidentiality of health personnel.

- **Problems and constraints**

Even the program was successful but there still have the problems and constraint which need to be solved or done such as male involvement in PMTCT. The least participation of men whom are spouses of positive pregnant women is also key gaps in PMTCT process. In some extent, the lack of men participation in VCT causes family problem when they find out that their wife is infected. Gaps seen in this complicated problem are concealment about HIV positive status among spouse or partners and less awareness of HIV transmission and its prevention method, particularly practicing of safe sex. Other causes of the mention unplanned pregnancy are less understanding of general public in family planning and contraceptive, and post partum and continuum care is not enough in terms of family planning and contraceptive as well. PMTCT can reduce mother to child transmission rate, but not new infected pregnant women. If the problem of new coming positive pregnant women and unplanned pregnancy of positive women continues, PMTCT is only following the problem of HIV transmission, and will not overcome it.

Pregnant women who have negative blood result. There is not enough post counseling for these women and their spouses in order to have awareness on HIV prevention and practice safe sex in order to stay negative.

Stigmatization and discrimination also is the problem. The HIV positive pregnant women did not come for follow up because they afraid of stigmatize and discriminate from their family and community. Some women have strong sense of being discriminated and disrespected in their rights. There are gaps in terms of the respect to their reproductive rights and their potential to make decision towards their own reproductive choice.

- ***The Way Forward for PMTCT and PMTCT-Plus program in Thailand***

Filling the gaps of its implementation process, the following activities

need to be strengthened:

Increasing and strengthening AIDS prevention campaign under concrete policy and implementation plan as well as budget allocation. Key messages upon this prevention campaign should go for promotion of safe sex, sex ethics, equality in sexual life among partner, including increasing negotiation power of women to men.

Promoting mass psychological campaign to eliminate stigmatization accumulated in Thai society by fear approach of previous AIDS prevention campaigns. Key messages about HIV/AIDS, right attitude toward sexual rights, reproductive rights, and safe sex should be blended in general mass media campaign e.g. commercial spots, novel, comics, television series or movies.

Active promotion on creating knowledge and raising awareness about VCT in all groups of people, in particular youth, and people in reproductive age was implemented. The campaign should be performed as raising health conscious for individual basic health care. At the meantime, quality of VCT should also be improved.

Goal for men participation in VCT/couple counseling process at the same time of service to their pregnant women were set up. Additionally, expanding VCT service to access more easily in local community and provide opportunity for potential and trained PLHA to assist PMTCT+ process in appropriate steps e.g. supportive pre-post counseling and care during pregnancy and after delivery, group meeting for distribution of necessary information such as sexual and reproductive health, family planning, contraceptive, and increasing of sexual negotiation power to their partners.

Working with PLHA network in supporting health staff to provide care for positive pregnant women during their pregnancy were coordinated. Possible supportive activities of PLHA network are psychological support to accept the blood result, to cope with community stigma, to learn about side effect of ARV and related useful information such as sexual health, reproductive health, sexual right, reproductive right, family planning and contraceptives.

At national level, integrating all related dimensions of AIDS problems and cooperating with concerned agencies that equipped with available supportive budget and capable personnel. The integration should be performed through joint policy formulation

and coordinating implementation plan. The integrated policy and implementation plan should also pay attention to other dimensions of AIDS, particularly sexuality and gender, and socio-cultural-economical dimensions, apart from emphasizing on treatment and care.

Promoting and increasing knowledge and awareness of local authority about AIDS and PMTC also as its related issues. This is to be confidence that after decentralization, local authority can manage and coordinate plan and budget allocation to appropriate response to AIDS and PLHA in their local community.

- **Lessons learned**

- The leadership must recognize the devastating scale of the epidemic and make a commitment in tackling the HIV/AIDS problem.
- Effective responses require involvement of all sectors of the society in addressing the underlying socio-economic and behavioral roots of HIV transmissions.
- Ongoing **research and development, surveillance, monitoring and evaluation** with the use of these data in developing policies and programs to changing conditions are essential to an effective response.
- Early and pragmatic action, **Knowledge and information management**, are needed especially in the area of **Provider support and customer protection**
- Holistic approach should be promoted to addresses human, social, economic and cultural aspects of the HIV/AIDS problem.

The effective program need to encompass all sectors of the society, involving efforts from the highest level to the grass-roots level, **Funder alliance**, NGOs and people living with HIV/AIDS.

Scale-up effective treatment and care programs

National scale-up of HIV quality improvement program in Thailand

Over the past few years, the Thai government began a national antiretroviral treatment program. Over 100,000 PLHAs were on ARVs in 2007. As HIV care is being provided in an increasing number of hospitals, the quality of HIV services should be assessed, and services that are missing or need improvement should be identified. The HIVQUAL model is a framework for HIV quality management that was developed in the early 1990s in New York State, which was based on the model developed for the statewide HIV Quality of Care Program for application to the national network of ambulatory HIV care programs. With assistance from the U.S. Centers for Disease Control Global AIDS Program in Thailand, in 2003 the HIVQUAL model began a successful adaptation and implementation to fit Thailand's national guidelines, resources, and health care system. This started with the adult module, followed by additional modules in 2005 including the pediatric HIV module, day care center module and voluntary counseling and testing module which have been developed and tested. HIVQUAL's success in improving

patient outcomes has led to its rapid expansion, from a 12-hospital pilot in 2003, to 140 hospitals by the end of 2007. A national scale-up of the adult module to cover 961 hospitals was planned and is expected to be completed by the end of 2008.

Rapid expansion of this model to the national level was initiated through collaboration between the Bureau of AIDS, TB, and STIs (BATS), the National Health Security Office (NHSO) and the Institute for Hospital Quality Improvement and Accreditation (IHQIA). This partnership created the local version of the project, known as a national continuous quality improvement (CQI)-HIV program, which included the three HIVQUAL pillars of performance measurement, quality improvement and infrastructure. These pillars are integrated and the activities occur as a continuous process.

1. Performance Measurement: This step is facilitated by the HIVQUAL-T software program and sampling strategies; the software program reduces the burden of medical record review through the use of simple and systematic data entry screens. Data are entered for key HIV ambulatory care indicators based on Thai guidelines for adult care, including CD4 monitoring, prescription of HAART, STI screening, Pap smears, TB screening and OI prophylaxis. Random samples are generated from the clinic HIV population to achieve 90% confidence intervals with a precision of plus or minus 10%. Individualized facility-specific data reports can be generated immediately following data entry. Data can also be aggregated for monitoring and evaluation of treatment access programs and disease control initiatives at the provincial and national levels. Annual data reports are submitted by clinics to the MOPH for compilation and analysis across clinics.

2. Quality Improvement (QI): QI projects are developed and implemented in areas found to need improvement based on the performance data. After one year of implementation, results are presented and discussed in regional group learning workshops to enable participants to share strategies for QI. After QI project implementation in Thailand, performance measurement results of adult HIVQUAL-T during 2006 were compared with the results during 2003 and 2005. The median percentages of eligible patients receiving CD4 count monitoring, TB screening, ARV treatment, syphilis screening, Pap smear screening, PCP prophylaxis increased.

3. Infrastructure: This step is to promote sustainability of quality management programs. The HIVQUAL project emphasizes the development of quality management plans and HIV quality improvement programs, including obtaining support from clinic leadership for performance measurement and improvement activities.

Role of partnership in national CQI-HIV program expansion

NHSO is the health care player for 76% of Thais and monitors HIV quality indicators. IHQIA provides training in QI methods to support hospitals in achieving national accreditation. With a national HIVQUAL-T advisory board for oversight, each partner has a defined role: MOPH leads the program; CDC and IHQIA provide training and technical support; and

NHSO funds the training and promotes participation of all hospitals providing HIV care. A website developed by MOPH is used to disseminate tools and best practices documents for the program, and to support on-line data submission and review. An annual national HIVQUAL-T forum was established to facilitate sharing of experiences, to obtain input from hospitals on program processes and tools, and to recognize hospitals with outstanding achievements.

Results of program expansion:

Training of trainers was conducted in 12 regions, covering 5-8 provinces each. MOPH and NHSO officials also participated in all trainings, demonstrating policy support for the program. Peer learning workshops at the provincial, regional, and national levels have allowed hospitals to share experiences, challenges, and solutions with each other. Performance measurement reports for 2006 were submitted by 106 hospitals in all 76 provinces, as of January 2008, 115 hospitals have already submitted year 2007 reports. On-line data submission has been limited by technical difficulties and data sharing sensitivities. The first national HIVQUAL-T forum attracted 475 attendees from 148 hospitals. Participants reported that key factors in implementation success were support from hospital leadership and sharing experiences among hospitals.

Lessons learned:

- The HIVQUAL model facilitates the delivery of an integrated package of comprehensive HIV care services. HIVQUAL highlights areas of care where improvement is needed, and through QI activities, facilitates integration of the components of care needed to deliver high-quality care.

- Peer learning through a group learning network to disseminate best QI practices helps maintain focus on HIV care QI.

- Leadership commitment with partnership among a wide range of stakeholders and endorsement by national and provincial leadership makes the rapid scale-up of program possible.

- Sustainability comes from hospital-level ownership of the QI process, integration with national CQI-HIV program and capacity building of staff in the MOPH, IHQA and NHSO to provide coaching for providers to develop, implement and sustain quality management programs.

Greater Involvement of PLHA/Migrants

Comprehensive Continuum of Care Center

The program of universal coverage started in 2001 and covers opportunistic infections and ART. There has been increased uptake of cases for the ART program every year. For efficiency in treatment with ARV, it is known that the patients need to get full information and understanding of the regimen and doses, and must practice self-care throughout. In addition, the monitoring system and support to the patients were required.

The situation analysis revealed that the increase in clients was straining the service system, and under-resourced health staff had no possibility to give full-time monitoring such as counseling, and home visits. This resulted in the necessity to involve people living with HIV/AIDS to take part in problem diagnosis, planning and even providing appropriate services. Furthermore, the PLHAs met each other to provide moral and physical support.

In 2003, the network of PLHA in partnership with ACCESS Foundation and Medicines Sans Frontieres-Belgium (Thailand) had developed a “Comprehensive Continuum of Care Center” which was built up from experiences of self-care and peer care of the PLHA. The objective was to create a participatory service system for PLHA for continued care and in a standard manner and in accordance with the treatment guidelines of the Ministry of Public Health.

This was a turning point in the role of PLHA from “service client” to “co-service provider”. The trained leaders of PLHA were prepared to be part of the team for providing information, giving counseling and following up the PLHA physically, mentally and socially through the activities of the group e.g. home visits, monthly meetings.

Besides, the clinical services in the comprehensive continuum of care centers, this program also included such activities as AIDS raising awareness in the community through discussions, serving as communicating resource persons on AIDS, trainings for the community leaders or youth. The activities aimed to reduce stigmatization and segregation and finally gain understanding in living together with PLHA. In some areas, the local organizations, for example local administration, gave priority to this model by setting aside the budget for PLHA’s activities.

Presently, there are 317 comprehensive continuums of care centers working with the hospitals with 42,763 clients, with support from the Global Fund and the Office of National Health Insurance, the agency responsible for the large public health service system of the country that gave priority and supported the budget for the centers continuously since 2006.

Networking: The Process of Networking for AIDS

The process of networking for AIDS is the process to build the participation of the PLHA. As a result, the first questions in the development of the network’s work were how best to have the PLHA participate which initially meant that they shared the feelings regarding the problems/situations they faced.

The capacity of the peer leaders of PLHA was built at all levels through activities ranging from one-on-one conversations, group discussions, training on information, essential skills e.g. opportunistic infection treatment and ART, strengthening PLHA groups, and the mechanism of intellectual property that barred access to drug, among others.

In addition, the network of PLHA produced IEC manuals, posters with AIDS-related content, such as a manual and poster on “AIDS, knowing means curing -- Share knowledge, share curing”. The contents are about opportunistic infections and ARV, and coverage for services in treatment and care.

There is a need for the development of a mechanism for network coordination which has a two- way information exchange among the members at the local level to the linkage of national network. In the past, the key mechanism for this was the regional support team consisting of volunteers from the leader’s groups and the network staff, working closely with the network committee. There were roles and responsibilities specified for each team, for example, resource persons in the training follow up and support, forwarding information, coordination with the groups, as well as coordination with government agencies, NGOs in their respective areas. They held quarterly meetings for both regional and national networks.

Each year, the meeting of the regional PLHA network assembly was held to conclude lessons learned, and jointly guided the direction and elected the representative to be the committee. The assembly meeting is the floor for meeting and exchanging experiences. The national assembly meeting was held every two years following the regional assembly’s meeting to set up the national objectives.

- ***Factors that helped promote access to treatment***

The situation of access to treatment of PLHA in Thailand has made substantial progress. In the last few years, the factors from many parts fostered the changes. At first, many more PLHA entered the service system than could be adequately managed. In addition, there problems of drug resistance to the first line regimen and needed the more expensive 2nd line treatments. The program needed to accelerate the development of services both for the increased numbers of the clients in first line and second line regimens and the development of quality services. Secondly, the policy makers and the authorities needed staff with good understanding of the service and to give priority to achieve full coverage of treatment. Thirdly, the civil society’s strength consisting of network of PLHA, NGOs on AIDS and public health, academics and experts, legal advisor, etc. needed to join to help push the agenda forward, to support the change in policy and service delivery in local areas. Lastly, the support of international organizations e.g. the funding support of the Global Fund, funds for drug procurement, and the development of service providers, and funding support to the civil society sector has been indispensable to the overall success of the program.

- ***Challenges in networking on AIDS in Thailand***

1. *Access to standard service for PLHA:* Total coverage on HIV/AIDS in the health services system is not always practical. There are still barriers to access to the national health insurance scheme, social welfare system, and civil servants welfare. For example:

- Laboratory tests (viral load, CD4, testing for resistant strains) was not able to do be done in accordance with treatment standards

expected, those with drug resistant problems were yet to be given second line regimens.

- ARV for children is not yet appropriate for the children in many cases.
- Those without national ID cards, prison inmates, ethnic minorities, migrant populations, and HIV infected children are not able to access the treatment.
- The government policy to bar access to drugs in the future e.g. Thai-U.S. FTA talks, with the topics calling for intellectual property threatens the drug supply. The amendment of the act on patents in the country will obstruct the promotion of cheaper drugs (generic) production in the country.

2. The community and the society at large do have complete understanding. There is still segregation, discrimination e.g. blood test prior to being employed, life insurance not accepted, children of parents living with HIV/AIDS were discriminated against and were segregated from the classroom, PLHAs with partners or newlywed or planning to have a child, were questioned inappropriately.

- ***Directions of future networking***

- 1. Campaign to promote access to treatment for all**

Campaigning for access to necessary drugs is required for sustained access to drugs. The Network of PLHA and Access Foundation will cooperate with alliances, both domestically and internationally, to do campaigns to obtain essential drugs unconditionally without patents or prohibitive drug prices. For example, the campaign among PLHA and the general to protest of the extension intellectual property protection, especially regarding drug patents was implemented in stages: Thai act on patents, FTA agreement, and measures to support access to generic drug essential for life.

- 2. Campaign to create understanding and to promote access to information about treatment and care to the public**

This will help the public to understand and accept PLHA as normal individuals who have the same way of life and basic rights as others. At present, over 100,000 PLHAs were treated with ARVs and have become healthier and are living his normal lives including having a family and children. It was found that the Thai people in general still have negative attitudes such as that PLHA should not marry or have children for fear that more will be infected And create further burden for society. Thus, it is necessary to help the public understand the PLHA's perspective, improve his/her access to the health service system, and to help the PLHA to live healthy with HIV and, in this way, minimize the impact of the epidemic on society. Also, public relations campaigns for the public need to inform persons who do not know their HIV status or suspect they may be newly infected.

2. **Development of quality services with continued follow-up of Comprehensive Continuum of Care Center**

This will help to increase the number of the groups covered by hospitals. To improve existing groups to be able to provide a PLHA-sensitive service which involves more than knowledge or data, but an appropriate attitude and concept, e.g. follow-up care for patients with drug resistance, working on infected women in sexual health, sex negotiation with partners, as well as working with infected mothers, seeking appropriate services for specific groups e.g. management of working process with affected children, ethnic minorities, migrant population, IDUs, etc.

3. **Development of enhanced follow up and capacity building**

This is intended for staff, leaders, committees of the network of PLHA who are in charge of following up and supporting the group to enhance the work of more diversified groups, and development of working with local organizations, for example, religious networks working on following up PLHA in the community, organizations working on prevention in the community, organizations working on affected children, organizations experienced in sexual health and reproductive health and organizations working with ethnic minorities and migrant populations, etc.

• ***Way forward to sustainability of the civil society's participation on health***

The development of the participation of PLHA in health services for true participation means the acceptance of the roles and responsibilities in working together equally. There could be coordination and participation as in working groups or committees at all levels ranging from the hospitals, provincial health offices, and community organizations.

○ **Participatory Involvement of Migrants Community in AIDS Prevention and Care**

The serious constraints found in working with migrant laborers were their different languages, cultures, and beliefs about health. Thailand has begun to overcome these obstacles by opening up and emphasizing the participation of the migrant community. In this regard, the migrant community health volunteers and the migrant health workers were developed to play a vital role as educators for migrant laborers to educate them in HIV prevention in their own language, serving as interpreters for the hospital personnel, serving as translator and counselor to the migrant community to help them know their serostatus, function as a coordinator in access to health services for those who need treatment as well as a coordinator in social

services, and as a worker to follow up on AIDS patients in the community.

Capacity building of the migrant community health volunteers, the migrant health workers, and the foreign unskilled laborers in Thailand is the challenge faced by all concerned in both government and NGOs. Bilingual trainings and activities were organized and the trainers must have basic tolerance of others' belief and culture and of the migrants from different countries. Opportunities for joint work as well as fostering positive attitudes in living together of Thais and foreigners must be created. This continuous work has helped reduce prejudice and is bringing about mutual respect for the roles of each other.

The existence of the migrant community health volunteers and the migrant health workers is accepted into Thailand's health system for the sake of efficient facilitation. However, both groups are considered as illegal migrants who were temporarily exempted to stay for unskilled labor. Hence, there must be advocacy to support the acceptance of these illegal migrants in the assistance of Thailand's health system over the longer term. In the past two years, some success has been made in this area based on mutual attempts of the government, NGOs and technical organizations in working together either officially or unofficially to push forward the acceptance of their existence from the National Security Committee, Ministry of Labour and agencies concerning foreign labor system. Finally, the permission has presently been granted to have these workers in the hospitals even though there is no direct hiring. However, the Thai Budget Office has approved the budget of foreign labor health insurance for hiring these positions. This is considered to be a favorably condition for budgetary sustainability.

At present, there are no less than 500 foreign assistants in the system as migrant community health volunteers and the migrant health workers, covering 30 provinces populated by foreign workers.

In addition, Thailand in the past two years has developed curricula, manuals and IEC for HIV prevention in at least three major foreign languages such as Burmese, Lao and Khmer (and in lesser spoken languages as Mon and Shan among others). The materials cover HIV and STI prevention, condom use promotion, VCT and Care of PLWA in the

community in order to educate the migrant populations more efficiently on AIDS.

Model development

Community-based pediatric HIV care using provincial network

- ***Background***

Since the initiation of the national antiretroviral treatment program in Thailand in 2003, more than 6,000 children have been treated at public hospitals. In Chiang Rai, approximately 80-100 HIV-infected children initiate ARVs each year. However, regional, or tertiary care, hospitals are increasingly overburdened by the number of patients in care, and many patients come from remote areas of the province, making visits to the regional hospital difficult. Taking care of children who are on ART is complex. Most Thai community hospitals lack both pediatricians and HIV treatment experience. Families living in remote areas have difficulty bringing small children to a regional hospital every month. The pediatric HIV care Team of Chiang Rai Regional Hospital (CRH) developed a comprehensive – community-based ART program which has been successfully implemented in the province and is now being expanded to more than 10 provinces with support from the Global AIDS Program – U.S.CDC and the Global Fund to Fight AIDS, TB, and Malaria.

- ***Community-based pediatric HIV care model***

During 2003-2005, CRH initiated an antiretroviral treatment (ART) model for HIV-infected children in collaboration with AIDS Access Foundation, a local NGO supported by UNICEF. The model is composed of 5 steps to provide comprehensive, community-based HIV treatment and care for infected children. This model involves caretakers, NGOs and people living with HIV, volunteers, and health care providers, all working as a team to provide ART and HIV care for children and families. The model includes the following steps:

1. **Clinical screening for initiation of ART:** CD4 count, chest x-ray, blood chemistry, lipid profile and hepatitis B and C infection tests are done. ART is initiated according to the national AIDS treatment guidelines by a pediatrician at the regional hospital.
2. **Family preparation before ARV initiation:** A home visit for each family is conducted by an NGO or trained PLHA to assess the family ability to take care the infected children and help to identify the

main caretaker in each family. A group educational session is given to caretakers prior to the ART initiation which includes knowledge on HIV/AIDS treatment and care (including ART) for infected children and HIV disclosure.

3. **ART initiation day:** After the child is seen by a pediatrician, a trained PLHA and/or NGO worker provides HIV and ARV group education for children and caretakers and coordinates practice sessions for caretakers to prepare ARV doses for the child.
4. **Immediate follow up after ART:** A PLHA volunteer or NGO worker conducts a home visit within 3 days after ART initiation to assess and promote ARV adherence.
5. **Long term follow up after ART:** Regular follow up clinic visits are scheduled for each child to receive clinical monitoring and ART. After the clinic visit, caretakers and children attend the child day-care activities to receive HIV-ARV education to promote good ART adherence. Trained PLHA or NGO workers conduct the child day care activities and do home visits for some families if ART adherence or psychosocial problems are detected.

- ***Expanded pediatric ART program to community hospitals and formulation of provincial network***

This model has been successfully implemented throughout all community hospitals. HIV-infected children are clinically improved with most of them having more than 90% adherence to ART dosing¹. The virological outcomes correspond to the ARV adherence and attendance at child day care activities¹. During 2005-2006, CRH provided practical training courses to 16 community hospitals to increase their pediatric HIV treatment and care capacity. ARV treatment is now initiated by a pediatrician at CRH, and for children who are clinically stable will be referred for continuing care at the community hospitals near their residence. They will be scheduled to meet a pediatrician at CRH every 6 months for clinical evaluation and performing CD4 testing.

- ***Outcomes and Challenges:***

During October 2004-February 2007, more than 300 health care providers and PLHA volunteers have been trained. Over 60% of targeted children are now receiving ART and HIV care by the community hospital ART team near their residences which has the same quality of services they would receive at the tertiary care hospital. More than 600 home visits were conducted. Data on 133/235 children eligible to be referred to community hospital care was analyzed after a median follow-up in community hospitals of 11 months (range 1-31); 129 (97%) children remain clinically stable with no new opportunistic infections, adverse events, deaths, or poor adherence reported. Only 4 children were referred back to CRH due to ART changes, adverse events, and poor adherence. Monitoring visits conducted by the CRH team 2-4 months after training observed that HCW were competent in pediatric HIV care, but periodic monitoring are needed².

This project has also helped to reduce the high CRH case-load by nearly 40%. This new arrangement allows the regional hospital to focus on initiating new ART pediatric cases, dealing with complicated patients, and providing technical support to its provincial care network.

In late 2007, MOPH adopted this program and has expanded to 10-15 provinces throughout the country, using the financial support from the Global Fund to Fight AIDS, TB, and Malaria. The outcomes of national scale up need to be evaluated.

V Major challenges and remedial actions

1. Progress made on key challenges reported in the 2005 UNGASS Country Progress Report

National Composite Policy Index: Human Rights

In the civil society's point of view, the government's work on human rights was not concrete enough concerning laws or regulations to prevent people living with HIV/AIDS from segregation, for instance, the non-discrimination law, and/or unequivocal speech to support human rights in the policies or strategies and legal assistance system specifically for PLHA.

Progress

The National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation (2007-2011) set forth the rights protection on AIDS as one of the strategies and identified indicators as well as the achievement of this strategy. An annual report on the situation of rights on AIDS, with the participation of sectors including PLHA, will be produced.

Within the strategy, the role of the Office of Attorney General was defined to develop counseling and services in rights protection on AIDS to the people. Also included was the role of the Human Rights Commission in coordinating the activities on rights protection and examining rights violation against the people with AIDS and giving recommendations to the government and agencies concerned in remedial actions.

There are laws and regulations for the protection of PLHA in the 2007 constitution (Article 30, paragraph 3)....prohibits discrimination based on physical or health status....guidelines for implementation in the workplace, and standards for AIDS care in AIDS-Response Standard Organization (ASO).

A few organizations in the civil society sector have been receiving complaints and providing counseling to the people, as well as providing lawyers to assist, for instance, the Center for Rights Protection on AIDS, Thai Network for People living with HIV/AIDS, and others.

Sexually Transmitted Infection Services

Resulting from the bureaucracy reform, the STI services had to be adjusted to be included in the general services of the provincial hospitals. This caused a lower number of sex workers and the STI patients to come for screening and treatment. Meanwhile, proactive services in STI prevention and control were decreasing and STI trends of students at 15-19 of age was found to be increasing.

Progress

There are many issues and problems that have been raised for this area and the Department of Disease Control has reviewed its standards as a tool for development the quality of services. But these efforts have not been fully successful, partly because services for sex workers require experienced practitioners.

Risk status of youth

Data from the behavioral and HIV surveillance show that the risk environment for youth, they are initiating intercourse at an earlier age, when the proportion of youth who have good knowledge of prevention and reproductive health is low.

Progress

Prevention activities among youth in the Global Fund-supported program in the school, workplace and the community as implemented by government and civil society, have had satisfactory accomplishments. However the coverage is limited and, therefore, the general level of preparedness among this group as a whole is still inadequate.

2. Challenges in 2006-2007 and Remedial Actions

During 2006-2007, the challenges relating to legal documents are as follows: -

- o (Draft) Act on Protection of People living with HIV/AIDS B.E...

In 2006, an attempt was made in good faith to propose the (drafted) act on Protection of People Living with HIV/AIDS. However, the process did not achieve widespread participation, especially of those to be affected by the (draft) act. Hence, the essence of the (drafted) act gave the impression more of rights violation instead of rights protection. Given this challenge, the networks and the groups of PLHA nationwide, NGOs and academics assembled for a meeting in March 2007 to present substantial criticisms and concerns to the Human Rights Sub-Commission on Health, as well as to declare the civil society's standpoints to call for the abolition of this (draft) act. The agency concerned subsequently voted to annul the (draft) act.

- o Establishments Act 1966 (amended in 2005)

This act was adopted to support the work in inspection, zoning, prevention and suppression of crimes relating to entertainment places. It has some significance to the access to social welfare of the sex workers because the labor force status of these workers in the establishments was not formalized. Thus, the workers of these establishments, especially male/female sex workers and transgender, in mostly lack legal status of hired staff/employees.

- o (Draft) Act on Ethical Review for Human Subject Research B.E.....

The point to this (draft) act involved the protection of volunteers in the research program and the civil society's participation. The proportion of beneficiaries participating in the Ethical Review for Human Subject Research remained

controversial and has been objected to by the civil society as well as complaints about a single-minded concept of medical sciences which laid the basis of this (draft) act while overlooking the views on human rights and relating social-cultural dimension.

Thailand has seen progress in its effort for rights protection on AIDS, although to a limited extent. There remain some challenges to tackle, especially regarding the issue of migrant populations about whom national security issues took precedence and barred the access to AIDS prevention and alleviation among this population.

- **Reduction of challenges faced throughout the reporting period and remedial actions**

Prevention in Youth

In the recent years, Thai society started to give priority to youth problem, yet, viewed as young people were troublemakers. The attitude of the adults, especially, teachers, health service providers, parents or guardians and other adults, towards sexual behavior among youth remained mainly that it was not acceptable. This attitude obstructed advocacy and life skills teaching on AIDS and sex education in educational places and in the family.

At the same time, there are many more agencies providing sex education to students and youth, using many different methods but without any system for sharing experiences. This is an opportunity to establish a network which should improve the sustainability and coverage of the best approaches.

There are many different agencies working with youth which are dealing with different aspects of the problem. At the implementation level, there is a lack of planning for quality of life development for youth and there is a lack of youth participation for planning the local activities.

Decentralization of the national policy to the local administrative levels has encountered obstacles to implementation because the local authority lack capacity in management of educational interventions, especially in the area of life skills trainings and sex education. As a consequence, there is inadequate priority and budget given to this component.

The National Committee for HIV and AIDS Prevention and Alleviation has appointed the sub committee for the advancement of the prevention in 2007 to accelerate youth prevention and other populations through TV campaign.

PMTCT and Reproductive Health Service

Special report from civil society on implementing UNGASS 2001 recognizes the importance of reproductive health in the program. A qualitative study of 108 pregnant women found that they were satisfied with the PMTCT service but there were gaps in the need for

more information about contraceptive options, family planning and rights to receive care without discrimination.

Even though the reproductive health plan calls for the involvement of the husband from the stage of ANC, reports from hospitals in 2007 found that only 38.7% of pregnant women were joined by their husband for VCT. This leaves a large gap in prevention for discordant couples and for preventing conflicts between husband and wife.

Follow up of children infected by HIV has not achieved satisfactory coverage. Only 54.09% of children born to HIV positive mothers return for blood checks at 18 months of age.

Under the plan of support from the Global Fund, collaborative efforts between the government and civil society and the community should be a learning experience in the area of reproductive health and should strengthen the role of the local administration to combat social stigma.

Sex workers

The challenges that barred sex workers to get access to health services and HIV prevention could be location which is too far from the place of employment and service hours are not convenient for most sex workers to visit. Many health service providers do not have a friendly service mentality, and may still have negative attitudes toward sex workers. Communication problems still persist between sex workers and health personnel because of the different perception and language problems. The name of the clinic may, the service setting and the color of OPD card specifically made for sex workers indirectly discriminates and stigmatizes them. Some sex workers with little education may have limited knowledge about prevention of STD and HIV; there is a need for intensified education for this group of sex workers. In addition, most of health care personnel in general hospitals do not have experiences in working with sex workers, which might affect their performances.

Outreach services for sex workers seem to be more difficult due to changes of working settings, e.g. street-based, sauna, karaoke or even through phone, internet and other channels. Furthermore, the existing Act on commercial sex work creates constraints the interventions designed for this specific group.

MSM

The attitude of the community, society and service providers toward MSM can present a barrier to access for services. MSM friendly services are still rare and government staffs need to learn improved technique of service delivery especially in the area of STD diagnosis and treatment. Community attitude against MSM leads to migration and makes outreach activities difficult.

The law on prostitution and lack of cooperation from entertainment establishments and saunas are obstacles to the success of the program especially for male sex workers.

IDU

A big challenge to preventing HIV spread among IDU is the lack of a clear harm reduction policy. This prevents greater achievements in coverage and effectiveness of interventions. In the past two years, the network of service providers, especially civil society and international organizations have tried to push for policies to increase the linkages in public sector programs.

Migrants

During the previous 5 years, there seem to be many institutions; both government and non-government organizations working on issues for international migrants but these are not well coordinated. Efforts have been made to create a migrant health strategy as well as master plan for HIV/AIDS prevention care and support for migrants and mobile population, and a master plan for border health has been drafted and finalized in 2007 by various stakeholders. Coordination structure has the following features: -

- Endorsement of Migrant Health Strategy
- Implementation of National AIDS plan among migrant populations
- Implementing cross-border collaboration especially with Myanmar.
- Create a quality database and information system for migrant populations
- Establish MoL policy on migrant health workers as legitimate employment
- Identification of sustainable resources for HIV and AIDS program among migrants

Treatment and Care

In the process of transferring responsibility for care to the national health insurance plan, service agencies had to modify their procedures especially in the area of record keeping for PLHA and in coordination among sectors and central offices.

- The emphasis of the program is on providing ART and less on psychosocial support. Also, asymptomatic PLHA do not receive care and attention until they are eligible for ART.
- Treatment of pediatric AIDS mostly occurs in large hospitals. This can be inconvenient and staffs need to be specially trained to provide disclosure counseling to children when they approach adolescence. To address this need there has been strengthening of the linkages between the provincial and community hospitals.
- When PLHA who are receiving ART feel healthy again, they may want to resume an active sexual life which may increase their risk of spreading HIV. Therefore, organizations in the public sector and civil society have been working hard in the area of prevention for positives and budget has been allocated to provide free condoms.
- Some PLHA are not in the national health insurance program, for example, foreign migrants, ethnic minorities. A solution to this problem is provided by the Global Fund to procure ARV drugs for

these populations. However, the challenge is how to sustain this support after the plan ends.

OVC

- **Problems**
- **AIDS-affected children are still suffering stigma and discrimination in the community.** For example, peers make fun of the affected children or ignore them because the teacher or guardian of the child, local leader or volunteers still have inadequate understanding or attitude, and this impairs their ability to communicate effectively and clearly with community members about AIDS.
- **Lack of coordination between government agencies:** The Ministries of Education, Health, Social Development, and Interior/Local Administration, are not implementing activities in a coordinated fashion. **Inadequate information:** There is not enough factual information about AIDS, or the proper channels to give voice to PLHA and other relevant individuals.
- **There is a lack of coverage of data on the local situation; information that exists is not well organized:** Organizations which collect this information do not always share this with each other (both public and private sectors) and this makes it difficult to get the full picture of the situation or plan comprehensively.
- **Lack of budget for prevention and treatment:** As funds for treatment have increased, funds and interest in prevention and social acceptance have declined.
- **The reform of the government structure has had unclear implications for programming:** The plan to decentralize authority more to the local areas has led to confusion and lack of a focal agency to coordinate.
 - PMTCT can reduce mother to child transmission rate, but not new infections among pregnant women. There is not enough post test counseling for these women and their spouses in order to have awareness on HIV prevention and practice safe sex in order to stay negative
 - Other causes of unplanned pregnancy included limited understanding of the general public regarding family planning and contraception, and post partum and the continuum care are not enough in terms of family planning and contraceptives as well.
 - The limited participation of men who are spouses of positive pregnant women is also a key gaps in the PMTCT process. To some extent, the lack of male participation in VCT causes family problems when they find out that their wife is infected.
 - There are gaps in terms of respect for women's reproductive rights and their potential to make decisions regarding their own reproductive choice.
 - Main challenges among these issues lie in reproductive rights, gender equity among men and women including

partner communication, and relationship of power among health service providers and receivers.

3. Concrete remedial actions that are planned to ensure achievement of agreed UNGASS targets

• Development of administration of prevention and control of AIDS

Due to the national reform effort to decentralize authority to the local level, it is necessary to review the strategy and methods used in the national program including the budgeting process and the context of implementation under the new system. At the same time, it is necessary to maintain the principles and involvement of the various collaboration organizations during this transition, including the government, NGOs and the community, using an integrated strategy of all sectors concerned. These efforts need to be consistent with the overall development efforts, with linkages among the various levels as follows:

- Build the capacity of the coordination system of the country;
- Build the capacity of the coordination system of the province;
- Build the capacity of the coordination system at the local level;
- Build the strength of communities to diagnose and resolve local problems.

• Review of laws and regulation that impede the prevention and control effort, and advancing the policy process

In reviewing the status of the situation in preparation of this document, several limitations were identified that are related to legal provisions that could possibly impede implementation and/or not protect the rights of PLHA. The review of the content and application of these laws, and looking at the outcomes, both positive and negative, feeds into the overall knowledge base of how the program is working, and informs the plans and policies to improve the effectiveness of implementation.

• Intensifying awareness-raising and attitude modification toward the problem of AIDS and society and specific populations

The findings of surveys on AIDS awareness in various population groups is still at a low level. In addition, behavior that could lead to risk of HIV infection is still present in most groups. There is still belief in myths about transmission and this may contribute to the persistence of discrimination. Therefore, it is necessary to revisit the needs for general population awareness-raising as needed and appropriate for the different sectors of society. Creating positive attitudes in society toward diverse segments including sex workers, MSM, IDU, and migrants, is an important condition leading to collaborative implementation among the relevant agencies or businesses which are participating in the prevention effort. These institutions and businesses include the entertainment industry, and industries which employ migrants, among others.

- **Creating client-friendly services, that is gender sensitive and respectful of individual rights**
 - Reproductive health services: Development of counseling services is at the heart of making reproductive health services client-friendly, gender-sensitive and respectful of individual rights. This approach contributes to the ability of the client to make an informed decision about the appropriate service. The review of this dimension for this report found that the involvement of men or the male partner is deficient.
 - Proactive outreach of services for specific groups: Because the prevalence of HIV among high-risk groups is still high, and because of social barriers, it is necessary to be proactive about service provision for these populations, with an understanding of their lifestyle. For international migrant, it is important to take language and culture into consideration when preparing communication materials or service interactions.
 - STI services. In reviewing challenges from the previous report, it appears that there is a need to have a more prioritized approach for tourist areas which are areas that contribute to more than average spread of STI. Also, because of changing sexual norms and increasing sexual diversity, it is necessary to adapt the service models accordingly, and engage the private sector in providing services, and harmonize related laws and regulations.
- **Development of access to and quality of care and treatment for PLHA**
 - Development of counseling services: Even though Thailand has expanded its ART treatment program, this achievement has come at the expense of other services that might help the person know when they are infected and seek treatment at the appropriate time. Other aspects that may have been neglected include developing the quality of pre- and post-test counseling and counseling for psycho-emotional support, and to train the PLHA in the elements of self-care.
 - Expansion of and developing the quality of PLHA support groups, and the role of religious institutions in patient care: There is a need to review past lessons to implement an appropriate strategy to establish linkages to improve this element and promote a fulfilling and productive life for the PLHA and his/her family.
 - Preparations for the emergence of treatment failure: Currently the Department of Disease Control has set up a surveillance system to detect cases of viral resistance. This system is a useful database for planning resource needs going forward. There needs to be continued close collaboration between the specialists and practitioners in this area.
 - Positive prevention: In 2006-2007 the public sector and civil sector have seen developments in methods of

- treatment. An element of this is secondary prevention of transmission which requires development of both biomedical and social skills in order to be successful. Training and guidance needs to take this into account.
- Treatment and care of pediatric cases of HIV infection. Currently, management of cases of pediatric AIDS is concentrated at large hospitals. Therefore, there is a need to strengthen the network between these hospitals and the local service outlets in order to aware of and apply the special features of treatment and monitoring that are specific to children. Another consideration is when to provide disclosure counseling to the children as they approach adolescence.
 - Development of management of TB-HIV co-infection: There is still a need to further strengthen case management of cases of TB-HIV co-infection, build staff capacity, and strengthen the linkages between the TB and HIV clinics to maximize cost-effectiveness of the program.
 - Access to ART among those not covered by the universal coverage program: It is necessary to closely follow-up those cases, supported by the Global Fund, who are receiving treatment outside the national health insurance plan.

VI Support from the country's development partners

The Information collection in this report was pooled from the government sector and international organizations, it excluded the part of non governmental organizations with the exception of the interventions supported by the Global Fund to fight AID, Tuberculosis and Malaria as briefly concluded below: -

1. Key Support Received

- ***Support received from the Global Fund to fight AIDS, Tuberculosis and Malaria***

Thailand had received funding support from the Global Fund for HIV/AIDS implementation over 3 rounds. The total amount received is US\$ 138.165 millions as in the following details: -

In Round 1, the support was for HIV prevention in youth in three settings i.e. schools, the workplace and communities, and for a comprehensive plan of Anti Retroviral treatment and care. The project period started from October 1, 2003 until September 30, 2008. The total funding is US\$ 109.35 million.

Round 2 focused on HIV prevention among migrant labors, starting from October 1, 2003 to September 30, 2008 with the total amount of US\$ 13.46 million, and for HIV treatment and care in infected mothers and families, started from November 1, 2003 to October 31, 2008 with the total amount of US\$ 14.08 million.

Round 3 emphasized HIV prevention and care among injecting drug users, started from October 1, 2004 until September 30, 2007 with the total amount of US\$ 1.275 million.

During 2006- 2007, the implementations of antiretroviral treatment and care both in Rounds 1 and 2 have been revised to target migrant populations and those excluded from the universal health insurance, resulting from the government's inclusion of the coverage of antiretroviral drugs in the universal health insurance program since the 2006 fiscal year.

- ***Thailand MOPH-U.S. CDC Collaboration (TUC)***

Thailand's MOPH-U.S. CDC Collaboration (TUC) is the collaboration between Thai Ministry of Public Health and the U.S. Centers for Disease Control on public health, disease control, surveillance, research and studies and capacity building in implementation in both clinical research in epidemiology and public health program, since the early years of the HIV epidemic in 1990. Initially it was a 5-year long program. In 2006-2007, the program covered 4 provinces including Bangkok, and expanded to targeting most-at-risk populations in other provinces. The budget for interventions is US\$ 3.5 million with the following HIV/AIDS prevention and alleviation activities: -

Capacity building in human resources: The system development of External Quality Assessment (EQA) for HIV Serology, CD4 Testing and HIV Viral Load and training on laboratory diagnosis for HIV Testing and CD4 counts, fungal cultures , TB cultures and Molecular methods for STD examination.

Development in treatment and care of PLHA: Development of quality care system HIVQUAL-T (more details in VI: Best Practices), ARV Network development of care in children (more details in VI: Best Practices), and Development of VCT Scheme, disclosure of blood results, and adherence promotion in ART.

Prevention of HIV: Development of community patterns and utilization of the AIC process in prevention, and HIV/AIDS prevention in IDU, MSM, female SWs, development of prevention scheme in seafarers by setting up counseling and information center at the points near to fishing piers, development of a drop-in center for high risk youth in Chiang Rai province.

Development and Expansion of HIV Infection Surveillance System, in cooperation with the Ministry of Public Health to monitor the epidemiological status and behavioral data i.e. HIV incidence surveillance using subtype BED IgG captured-based enzyme immunoassay, hand-held computer-based behavioral surveys in youth.

▪ ***Support from other development partners and international organizations***

HIV/AIDS Implementation among Most-at-risk Populations

During the reporting period, the majority of support from Thailand's development partners had poured into the program among most-at-risk populations i.e. Injecting Drug User (IDU), Sex Worker (SW), Men having Sex with Men (MSM) and Migrant Populations. Both the government and civil society sectors have been supported for their program implementation in Bangkok Metropolitan and other cities.

The interventions among IDU consisted of 1) policy development i.e. policy strengthening program supported by the United Nations Office on Drugs and Crime (UNODC), 2) development of working scheme and capacity building program including an outreach program supported by TUC; Technical capacity building of provincial health staff on ARV treatment and comprehensive care services for IDUs living with HIV/AIDS in Thailand supported by the World Health Organization (WHO); Drug and HIV/AIDS Outreach Program and First National Meeting on Harm Reduction in Thailand supported by UNAIDS and 3) research and studies including a retrospective study of the comparison of adverse outcomes of Nevirapine use as a part of ART among IDUs and non-IDUs living with HIV/AIDS supported by WHO.

HIV Prevention in Men having Sex with Men comprised of 1) service and capacity building e.g. prevention interventions for MSM including VCT/STI services by TUC; Strategies to Strengthen HIV Prevention among MSM in Saunas in Bangkok by United Nations Educational, Scientific and Cultural Organization (UNESCO) 2) research and study i.e. Advocacy Campaigns and Policy Research to Strengthen and Maximize the Prevention of HIV/AIDS and STIs among MSM in Saunas by WHO.

Regarding the interventions in Sex Workers, the United Nations Population Fund (UNFPA) has strengthened capacity and networks for STI/HIV prevention in sex work settings. The national forum to exchange information and create alliances was held in October 2007 with positive involvement from all key stakeholders. The condom program is strengthened through the establishment of a national working group and curriculum development for provincial program managers on comprehensive condom programming. A project designed to improve quality of STI clinical and outreach services for sex workers by TUC is in place.

UNFPA has strengthened capacity and networks for STI/HIV prevention in sex work settings. The national forum to exchange information and create alliance was held in October 2007 with a positive involvement from all key stake holders. Condom program is strengthened through the establishment of national working group and curriculum development for provincial program manager on comprehensive condom programming.

The interventions in migrant populations were supported by Canada's Southeast Asia Regional HIV/AIDS Program with funding from the Canadian International Development Agency (CIDA), and Strengthening Networks on Migrant Sexual Health by the Rockefeller Foundation.

With regard to the abovementioned most-at-risk populations, the United States Agency for International Development (USAID) supported the civil society in the implementation of HIV prevention, treatment and care by funding some international organizations e.g., Family Health International (FHI), Population Services International (PSI), Pact and Alliance.

Interventions among the general population

Apart from the most-at-risk populations, the international organizations mainly supported interventions among youth and reproductive age as follows:-

The Prevention of Mother-to-child transmission was supported nationwide by the United Nations Children's Fund (UNICEF) under the HIV/AIDS Prevention and Care among Children program. The program aimed at preventing HIV infection among children and youth, focusing on female youth in the reproductive age group, improving services for mothers with HIV/AIDS and preventing mother-to-child transmission of HIV, providing HIV/AIDS affected children and families with better access to health services, support and improved quality of life including enjoyment of the same rights as other members of society, supporting development of the capacity of partners working at all levels, and emphasizing a rights-based approach. UNFPA has supported the project to prevent HIV infection

among pregnant mothers (Stay Negative) by focusing on HIV negative pregnant woman. Male involvement and a comprehensive approach are key strategies to this project. The model is well accepted by service providers and clients and will be expanded through the MOPH network.

The French government supported the research program namely 'Optimization of HIV prevention and treatment in the context of the expanding universal access to HIV care in Thailand Program', to find the best methodology for PMTCT that helped children remain negative and eliminated drug resistance in the mother. The other research was to find the best antiretroviral treatment suitable to adults and children. UNFPA was the main supporting organization in reproductive health services. The programs included 'Strengthening Gender-Sensitive SRH and HIV /AIDS Prevention for Youth with Community Commitment in Northern and Southern Provinces of Thailand' and 'Improved Access to Reproductive Health Services by Border Populations'. The programs were implemented in the north and the south of Thailand, to improve access to reproductive health education and services in quality, gender-sensitive and age-specific reproductive health, including improving HIV/AIDS counseling and care, by women, men and particularly youth, at the project service delivery points. UNFPA has also supported the Department of Health to strengthen the reproductive health services and rights for people living with HIV.

▪ ***Support on Monitoring and Evaluation of HIV/AIDS Prevention and Alleviation***

UNAIDS and other UN agencies in Thailand i.e. UNFPA, UNICEF and UNIFEM had financially and technically supported the 3rd national sexual behavior survey conducted by Institute for Population and Social Research, Mahidol University. The survey sought to measure risk behaviors, and knowledge about antiretroviral drugs to address the needs of the evolving prevention and care situation. The findings will be useful for planning and setting up the guidelines of the national HIV/AIDS prevention and alleviation during the next steps.

UNICEF and UN agencies in Thailand i.e. UNDP, UNESCO financially and technically supported the data compilation on children situation to evaluate child development in Thailand. It was the first time for Thailand to have this national survey conducted by the National Office of Statistics in association with Ministry of Social Development and Human Security, Ministry of Education and Ministry of Public Health.

In 2007, both UNAIDS and TUC had supported the review of existing national monitoring and evaluation in which the development of a unified system of the national monitoring and evaluation of HIV/AIDS prevention and alleviation was expected.

UNFPA supported the review of STIs/HIV prevention among sex workers and held a workshop on size estimation and approaches to sex workers in diverse settings. National and regional program managers from government offices, and staff from NGOs have been trained to apply the recent knowledge in their own settings. The Bureau of AIDS, TB, and STI

(BATS) has updated the manual and guidance for annual surveys of sex establishment and sex workers. UNFPA has supported BATS to train provincial officers on this revised guidelines and conducting the survey.

2. Actions that need to be taken by development partners to ensure achievement of the UNGASS targets

- Evidence-based planning and implementation of effective HIV/AIDS epidemic programs
 - Generate additional evidence for improved HIV program planning, implementation and decision-making on gender implications, migrant health care financing options, migrant health information system, sex workers, sex education programming by the Ministry of Education, and sustainable financing alternatives for AIDS programming,
 - Enhance national and local responses to AIDS targeting and interventions with the most vulnerable and marginalized populations,
- Capacity of key government and civil society organizations to plan, develop and implement rights-based, gender sensitive policies
 - Develop capacity of implementing partners for effective HIV program planning and implementation at national, provincial and local levels
 - Enhance decentralized program planning and implementation for local responses to HIV at the provincial and sub-district level
 - Support advocacy activities and legal framework development for rights-based issues for HIV responses
 - Develop capacity for enhanced GFATM HIV grant implementation
- Capacity of civil society, especially groups and networks of PLWHA, to be equal partners with government in the national response to HIV/AIDS
 - Continue technical assistance for the capacity assessment and development of key civil society partner groups and networks
 - Develop capacity of targeted civil society partners and networks for implementation in response to identified needs
- Cultural and linguistically appropriate HIV prevention and sexual-reproductive health information and material
 - Strengthen HIV programming for migrants and ethnic minorities
 - Enhance cross border and regional collaboration for HIV/AIDS Responses among migrants and mobile population

3. South-South Cooperation

Besides the country's administrative management and the support from development partners and external resources, Thailand, has also engaged in cooperation with developing countries for decades. The objectives aim for poverty reduction, health improvement and education development both inside and outside the region. Thailand's existing technical expertise including support of the development partners has been shared for social and economic sustainability of the country partners. It was the Thailand

International Development Cooperation Agency (TICA), of the Ministry of Foreign Affairs which played the role of implementer and coordinator of this cooperation. The country beneficiaries about AIDS in the Asia region include the Royal Kingdom of Cambodia, the People's Republic of China, Timor Leste, Bangladesh, Pakistan, Bhutan, the Philippines, Lao People's Democratic Republic, Mongolia, Maldives, Myanmar, Nepal, Sri Lanka, the Socialist Republic of Vietnam, Indonesia and Thailand.

The modes of cooperation are bi-lateral, annual international training, technical cooperation among developing countries, tri-lateral and regional cooperation and Thai volunteers programs. The technical cooperation is carefully designed in response to the needs of Thailand's partner countries based on Thai expertise. In the reporting period, the following trainings were organized: HIV/AIDS Prevention among Adolescent and Young People, HIV/AIDS Prevention and Treatment in Children and Vulnerable Young People, HIV/AIDS Prevention from Mother-to-Child Transmission, Training Course on the Management of Antiretroviral Treatment Program for National and Local Program Manager, Training Course on Sexually Transmitted Infections (STIs) Case Management Skills.

The Government of Thailand allocates funding to programs for South-South Cooperation on annual basis. Besides the government budget, there are external resources from the development partners such as the United Nations Development Program (UNDP), United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), and Japan's International Cooperation Agency (JICA) which are contributing to joint programs with Thailand on a cost-sharing basis.

UNFPA's program on 'South-to-South Cooperation in Reproductive Health and Population Issues: Thailand' has been engaged by the Thailand International Cooperation Development Agency (TICA), Ministry of Foreign Affairs. The objectives were to have at least 10 Asian countries, including Thailand, participate in the program to create a functional network for information exchange; agreements on priority issues on inter-country and/or cross-border population and development reproductive health and gender issues (e.g. reciprocal reproductive health information and services including HIV/AIDS prevention, situation assessments and analysis); have at least 4 national institutions and organizations provide quality education and training information and technical assistance in population and development, reproductive health and/or gender knowledge management; and lastly, have one activity on population and development, reproductive health and gender including HIV/AIDS prevention for border populations.

Cooperation of international civil society

In 2007, GESTOS Brazil in coordination with civil society sectors in 16 countries including Argentina, Belize, Brazil, Chile, India, Indonesia, Kenya, Mexico, Nicaragua, Peru, South Africa, Uganda, Ukraine, Uruguay, Thailand and Venezuela had implemented the UNGASS AIDS Forum Program. The objective was to monitor the progress of the achievement of UNGASS in sexual and reproductive health. The program aimed that the countries gain better knowledge and understanding of sexual and reproductive health in their respective settings in each coordinating

country, and extend the civil societal participation in monitoring international public policy as well as advance the sexual and reproductive health issues to the next level of the AIDS agenda.

VII Monitoring and evaluation environment

1. An overview of the current monitoring and evaluation (M&E) system

Review of the current M&E system

In 2006, the Department of Disease Control, as the secretary of the National Committee on HIV/AIDS Prevention and Alleviation, in support of UNAIDS and the Thai Ministry of Public Health and United States CDC Collaboration (TUC), reviewed the existing national monitoring and evaluation system which included the following 3 categories: - 1) Monitoring of HIV/AIDS situation and epidemic scheme; 2) Monitoring of HIV/AIDS response; 3) Evaluation of the needs in the coordination mechanism of the agencies responsible for each individual database as well as linkages and analysis for systematic utilization, as briefly detailed below: -

1) Monitoring of HIV/AIDS Situation and Epidemiology

Consisting of 3 databases, these include registration of symptomatic persons and AIDS patients; surveillance in specific populations and the health office's internal recording system. The surveillance in specific populations was comprised of HIV prevalence surveillance; behavioral surveillance, entertainment place surveys and reports on those with sexually transmitted infection (STI) who received services at the health service outlets. In 2004, the Bureau of Epidemiology with support of the TUC began the surveillance on HIV infection incidence using the BED IgG ELISA technique for new infections in blood samples of the infection surveillance system collected from Bangkok and 24 provinces.

The Bureau of Epidemiology has disseminated the above information in the form of monitoring reports in the respective systems, reports in

epidemiological surveillance journals, and also on the following website:
<http://epid.mop.go.th>

In addition to the national system, some provincial health offices have their additional monitoring system on the situation of some specific populations. The findings showed how the data were different among the provinces and entailed better understanding of the status of the national epidemic.

2) Monitoring of HIV/AIDS Response

Monitoring of the national response or the national implementation on HIV/AIDS prevention and alleviation is mainly the monitoring at the level of outcome and impact in HIV infection surveillance system and behavioral surveillance.

Monitoring at the level of results of implementation and service coverage is the monitoring of responsible agencies in each project/program or plan. This, nevertheless, could not yet reflect the national service coverage.

In resources spending for monitoring in the implementation of HIV/AIDS prevention and alleviation, the database of AIDS spending was not available, nor was the data process system. In fact, even the agencies with continuous expenditure reporting system, such as the Global Fund and other international organizations, have not categorized groups of expenditure following National AIDS Spending Assessments (NASA); instead it was categorized by respective donors' requirement.

Consequently, the monitoring of resources spending process for the national implementation has used a comprehensive process. By collecting actual expenditures from the existing system in the country i.e. health insurance funds, social insurance, civil servant's medical welfare as well as the calculation of expenditure cost per person times the number of service clients in accordance with the NASA standard. However, once Thailand exercises the decentralization of budgeting to local administration, there would be a need to conduct sample surveys in order to see how the local administration is monitoring actual expenditures.

3) Evaluation

The latest reviews on national evaluation were survey-based reviews in 3 groups including household survey, school survey and review and evaluation. These efforts were not yet identified to be part of the national evaluation framework. Evaluation was mainly included in the plan of/project implementation.

With the cooperation of the Thai working group, an affiliation of East-West Center, Ministry of Public Health and academics, the epidemic was described by the estimation supported by the computer modeling software "Asian Epidemic Model" (AEM), with Thailand's HIV epidemiological database being applied. The first analysis was done in 2000 and the epidemiological database was later updated in 2005. The

estimate of new infections as well as the number of PLHA and the needs for ARV of PLHA in both adult and children was projected through 2011.

- **Monitoring and Evaluation Development**

The National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation 2007-2011 sets forth that monitoring, evaluation and research and knowledge-based development for the HIV/AIDS response be a strategy with following 3 goals :-

- a) A unified system of monitoring and evaluation on a plan of HIV/AIDS prevention and alleviation;
- b) Database system is up-to-date, in a timely fashion, practical and with achievements demonstrated;
- c) All levels of agencies can utilize the information technology of M&E for planning and analyzing the implementation plan.

In 2007, Thailand has developed the M&E system as follows:-

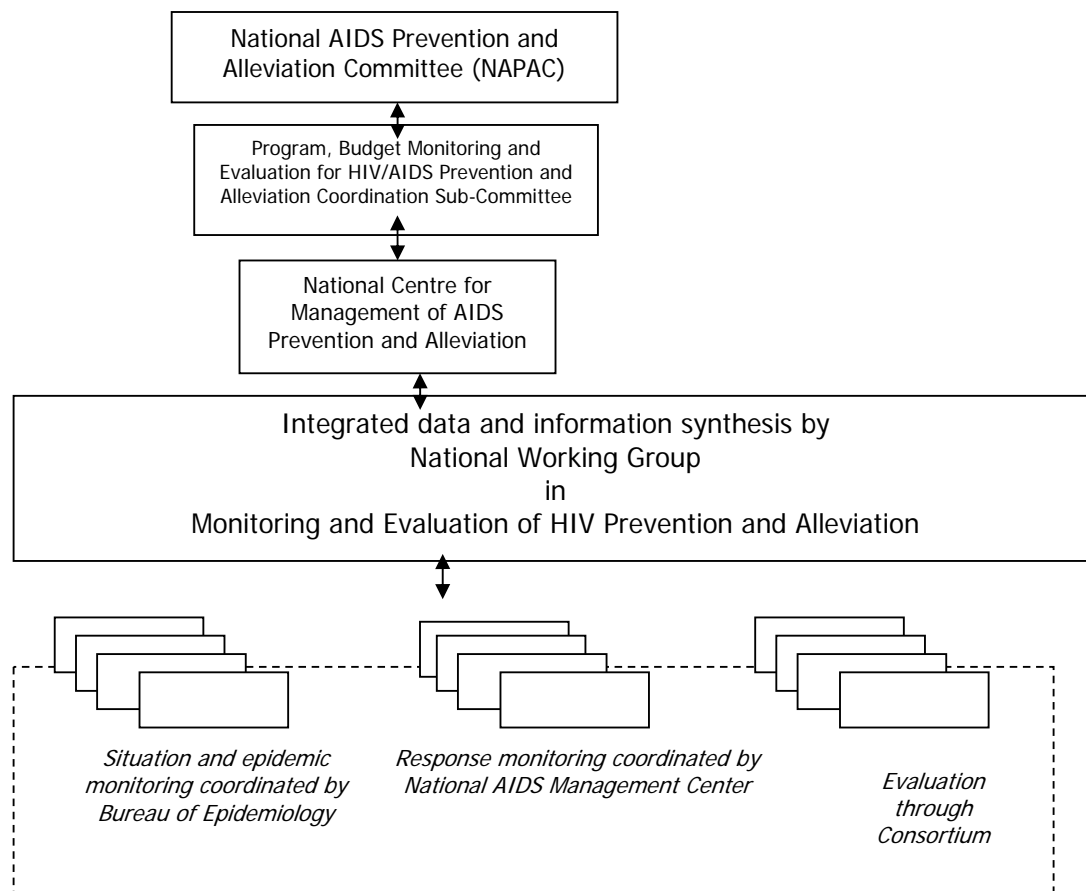
1) Structure of Monitoring and Evaluation System on the National HIV/AIDS Response

In accordance with the above-mentioned review as well as the guidelines recommended to the countries by UNAIDS for their consideration of a unified monitoring and evaluation system, the Department of Disease Control has subsequently coordinated in making a proposal in terms of structure, implementation and administrative management of the monitoring and evaluation system for the national HIV/AIDS prevention and alleviation. The proposal was presented to the National Committee on HIV/AIDS Prevention and Alleviation and was endorsed on 12 January 2007 as follows:-

The Bureau of Epidemiology is the focal point for monitoring the situation and epidemic dynamics. The National AIDS Management Center is the focal point for monitoring the whole HIV/AIDS programs. The Consortium mechanism takes responsibility for evaluating the national HIV/AIDS prevention and alleviation effort.

Data synthesis of all three components of the M&E system would be processed by the national working group for the monitoring and evaluation of HIV/AIDS prevention and alleviation. The national working group consists of personnel of the above 3 main offices, technical experts from universities and institutions, civil society and international organizations. Under the Department of Disease Control, the Coordinating body is the Office of Technical Development to Support the HIV/AIDS Response.

The essence of synthesis including the recommendations for the development of policy and strategy on HIV/AIDS prevention and alleviation would be through the mechanism of the National AIDS Management Center and the Program, Budget, Monitoring and Evaluation for HIV/AIDS Prevention and Alleviation Coordination Sub-Committee, and then goes to the National AIDS Prevention and Alleviation Committee.



2) Framework of Monitoring and Evaluation System on National HIV/AIDS Prevention and Alleviation

In 2007, the meeting was held to discuss preparing the monitoring and evaluation framework with the basis of the National Plan for Strategic and Integrated HIV and AIDS Prevention and Alleviation 2007-2011 and the consideration of the construction of core indicators of the United Nation General Assembly Special Session on HV/AIDS (UNGASS) 2008.

The 2008 UNGASS reporting process has determined one of the essential objectives as developing working groups comprising sectors from the government, NGOs, civil society, academics and international organizations to regularly monitor the country progress (refer to the process in the first section).

3) Development of Geographical Area of Monitoring of the Comprehensive Situation

Data analysis of the existing surveillance system has clearly verified the differences of the problem status in each region. It has consequently led

to the recommendations for site development for the monitoring of the national AIDS situation as comprehensive monitoring sites. To this end, the process for provincial resource development will help them to benefit from their own data to work locally and efficiently on HIV/AIDS prevention and alleviation. This will encourage the provinces to develop the database necessary for their respective settings. In parallel with it, the monitoring of AIDS status and response will be distinct which will be brought to the policy development process and a systematic strategy for HIV/AIDS prevention and alleviation.

Site selection for developing a comprehensive monitoring was scrutinized to cover the whole country, to reflect the diversified dimension of cultures and people's ways of living. In the first phase, 13 provinces were selected and 7 out of these were being developed, with the process to establish the mechanism for developing consistent local capacity under the collaboration of the Department of Disease Control and the academics of the universities.

2. Challenges faced in the implementation of a comprehensive M&E system

- Establishing the mechanism for advancing the implementation following the structure of a national integrated monitoring and evaluation, endorsed by the National Committee for HIV and AIDS Prevention and Alleviation is a challenge. The process has been outlined by the national working groups comprising of government, civil society, academics and international organizations sectors. The process is time consuming, and cooperation of all sectors is needed for the participation to have an effect on the national monitoring and evaluation in all dimensions and over time.
- Bureaucracy reform and the decentralization to local administration make it impossible to directly follow up on implementation and the budget for spending to HIV/AIDS response from the central authority.
- The existing monitoring and evaluation could not reflect the changing situation sufficiently, especially in the case of most-at-risk populations. There is no follow-up system of the service coverage despite the mid-term review of the previous AIDS prevention and alleviation plan and the evaluation of health sector response.
- Linkage of the monitoring and evaluation system in the implementation of NGOs is incorporated in the national system. However, that only included the interventions financially supported by the Global Fund and the government.
- Support to HIV/AIDS prevention and alleviation from other funding sources, either from international organizations or bilateral agreement as well as the support of Thailand to other countries, with the exception of the Global Fund support, was implemented by individual agencies receiving the support. Consequently, there were no systematic data and information, which resulted in ad hoc collection of the data/information.
- Too little utilization of integrated data and information compared with the existing data collection. One reason would be that the agencies

responsible for the database have no systematic dissemination of integrated data and collection that can be widely accessible.

3. Remedial actions planned to overcome the challenges

- Planning for Monitoring and Evaluation of HIV/AIDS Prevention and Alleviation (2007-2011). Use of the working groups for 2008 UNGASS progress report writing, comprised of government, civil society, academics, international organizations sectors, as the mechanism to develop a steady comprehensive M&E system and the development process of the ongoing national comprehensive monitoring and evaluation. Goal setting to complete the planning for monitoring and evaluation of national HIV/AIDS prevention and alleviation, within the period of the national plan for strategic and integrate HIV/AIDS prevention and alleviation (2007-2011), is May 2008.
- Estimation of target populations. Review and development of a working group for analysis and synthesis in the estimation of target populations, for the planning of prevention, treatment, care and support of people living with HIV/AIDS and the affected families. The parameter is outlined for review within 2008.
- Database management for monitoring of HIV/AIDS situation and the implementation coverage. Review and integration of the existing data to reduce burdens of the agencies responsible for data collection, to create a mechanism for improvement or increase of databases, to integrate the follow-up on AIDS issues into the national demographic survey in the existing systems in order to keep track of the situation, or to evaluate the coverage efficiently and effectively.
- Development of monitoring and evaluation capacity. As a result of bureaucracy reform and the decentralization to the local administration, it is necessary to develop the capacity of local agencies for the ability in quality monitoring and evaluation of the implementation on HIV/AIDS response prior to increased efficiency of local resources. The major target for this activity in 2008-2009 is set to include the Provincial HIV/AIDS Prevention and Alleviation Operation Centers, as the vital part to advance all sectors' interventions through the mechanism of the Provincial AIDS Prevention and Alleviation Sub-Committee.

4. The need for M&E technical assistance and capacity building

- Size estimation of target population
- Review of the estimation of number of adult and child PLHAs who need ART
- Analysis of database needed to be improved or created in order to keep pace with the changing situations
- Planning of tracking the coverage of HIV/AIDS programs, particularly the community-based survey

ANNEX 1

Consultation/preparation process for the Country Progress Report on monitoring the follow up to the Declaration of Commitment on HIV/AIDS

1) Which institutions/entities were responsible for filling out indicator forms?

a) NAC or equivalent	✓Yes	No
b) NAP	✓Yes	No
c) Others Yes No (please specify)		

2) With inputs from

Ministries:

Education	✓Yes	No
Health	✓Yes	No
Labor	✓Yes	No
Foreign Affairs	✓Yes	No
Others	✓Yes	No

(please specify)

1. Ministry of Transportation
2. Ministry of Defense
3. Royal Thai Police
4. Ministry of Justice
5. Ministry of Culture
6. Ministry of Interior
7. Office of the National Economic Social Development Board
8. Ministry of Information and Communication Technology
9. Office of social Development and Human Security
10. Social Security Office
11. The Government Public Relation, The Prime Minister Office

12. Bangkok Metropolitan Administration

13. Nation Health Security Office

Civil society organizations	✓Yes	No
People living with HIV	✓Yes	No
Private sector	Yes	✓No
United Nations organizations	✓Yes	No
Bilateral	✓Yes	No
International NGOs	✓Yes	No
Others	✓Yes	No

(please specify)

1. Independent Resource Persons

3) Was the report discussed in a large forum?	✓Yes	No
4) Are the survey results stored centrally?	✓Yes	No
5) Are data available for public consultation?	✓Yes	No

6) Who is the person responsible for submission of the report and for follow-up if there are questions on the Country Progress Report?

Name / title: Dr. Petchsri Sirinirund / Senior Expert in Prevention Medicine

Date: _____ 31 January 2008 _____

Signature:  _____

Please provide full contact information:

Address: _____ Department of Disease Control, Ministry of Public Health, _____
_____ Muang, _____ Nonthaburi Province _____ 11000, Thailand _____

Email: spetchsri@gmail.com _____

Telephone: _____ (66) _____ 2590 3221 _____

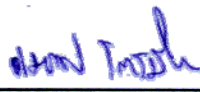
ANNEX 2

National Composite Policy Index (NCPI) 2007

COUNTRY: THAILAND

Name of the National AIDS Committee Officer in charge:

Dr. Pachara Sirivongrangson

Signed:  (For: Dr. Pachara Sirivongrangson)

Postal address: Bureau of AIDS, TB and STIs Building 5 3rd Floor

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ANNEX 4
2008 Specific progress reports

4.1 National AIDS Spending

National Funding Matrix — 2007

Cover Sheet

Please provide the following information when submitting the completed National Funding Matrix.

Country:

Thailand

Contact Person at the National AIDS Authority/Committee (or equivalent):

Name: Miss Waranya

Teokul

Title: Director, Monitoring and Evaluation on Social
Development Strategy

Contact Information for the National AIDS

Authority/Committee (or equivalent):

Address: National Economic and Social Development
Board

962 Krungkasem Road. Bangkok .10100 Thailand

Email: waranya@ nesdb.go.th

waranya@

hotmail.com

Telephone: 66 2280 4085 ext.

3506

==

Fax: 66 2281

2803

Reporting Cycle: 2007 calendar year _____ or fiscal year

**For a fiscal year reporting cycle, please provide the start and
end month/year:** 10 /2006 to 09 / 2007

Local Currency:

BATH

**Average exchange rate with US dollars during the reporting
cycle:** 33.7 BATH : 1 USD

Methodology:

1. Directly request financial information from known financing sources ,i.e.
 - Government Agencies such as National Health Security Office (NHSO), Ministry of Public Health , Ministry of Social Development and Human Security etc.
 - International Agencies such as UNICEF, CCM(GF) etc.
2. Compile secondary data on actual expenditure on HIV/AIDS where available from financing Agents.
3. Impute based on PQ approaches (P refers to price or unit cost, Q refers to quantity or _____ services rendered, mostly relied on epidemiological data) where there is no secondary_ data available, for example, expenditure on ART, Treatment of opportunistic infections and laboratories from Social Security Scheme (SSS) and Civil Service _Medical Benefit Scheme (CSMBS)

(Please confirm which methodology – National AIDS Spending Assessments, National Health Accounts or Resource Flows Surveys – supplied the data for the National Funding Matrix. In addition, please provide information on how and where to access the full report from whichever methodology was used to collect the data.)

Unaccounted Expenditures:

1. Due to gross lack of data, we did not cover expenditure by local government and domestic private sources, e.g. employers and households out of pocket payment
2. Fiscal year (October to September) for government expenditure and calendar year (January to December) for international expenditure are treated equivalent
3. We omit to impute outpatient care for OI spending due to lack of pattern of outpatient visit of OI after ART period. The reporting figure is only OI spending for inpatient care. Note that before universal access to ARV cost structure between OP and IP for OI patient from 14 hospitals was 70.53% and 29.47% for OP and IP, respectively.
4. We omit to impute PMTCT among pregnant women living with HIV who enrolled with other health insurance schemes, i.e., SSS and CSMBS.
5. External assistances from some agencies are omitted due to the fact that it was no further explanation whether it was approved or disbursed. In addition, they are aggregated amount provided for few years period.

(Please specify if there were expenditures for activities in any of the AIDS Spending Categories or subcategories that are not included in the National Funding Matrix and explain why these expenditures were not included.)

Budget Support: Is budget support from an international source (e.g. a bilateral donor) included under the Central/National and/or Sub-national sub-categories under Public Sources of financing?

yes No

UNGASS on HIV/AIDS reporting requirement 2008
National Expenditure on HIV/AIDS¹

Estimated by the Thai working group on NASA
Thursday, January 24, 2008

¹ The Working Group would like to dedicate this piece of work to Dr.Sanguan Nittayarumpong, the Late Director of NHSO. His CL initiation enabled all PLWHA under UC scheme with clinical implication to access to ARV.

Objectives

1. To estimate Total Expenditure on HIV/AIDS (TEA) in 2007
2. To estimate TEA for the following key indicators:
 - a. Baht per capita population
 - b. Baht per capita PLHA,
 - c. percent of GDP
 - d. percent of Total Health Expenditure (THE)

Methods

1. With the application of two dimensional matrix of health financing sources by healthcare function, we deliberately do not provide expenditure by healthcare providers
2. Compile secondary data on actual expenditure on HIV/AIDS where available from financing Agents
3. Impute based on PQ approaches (P refers to price or unit cost, Q refers to quantity or services rendered, mostly relied on epidemiological data) where there is no secondary data available, for example, expenditure on ART, opportunistic infections and laboratories from health insurance scheme, i.e., Social Security Scheme (SSS) and Civil Service Medical Benefit Scheme (CSMBS)

Data sources

1. Total actual expenditure on HIV/ AIDS was received from available government and donor sources such as Ministry of Public Health, National Health Security Office who is responsible for universal access to ART program and OI for HIV patients under universal health care scheme (UC), the Comptroller General Department of the Ministry of Finance on public expenditure on HIV/AIDS, Global Fund, other bilateral and multilateral donors.
2. The most update GDP for 2006 was retrieved from National Account Department of the NESDB. The 2006 GDP was used to project 2007 GDP using 4.5% real term growth and 1.7% inflation in 2006-07, therefore the adjustment is 6.2%
3. Total Health Expenditure for 2007 was retrieved from National Health Account 1994-2005 which was produced by International Health Policy Program, Thailand and estimate for 2007 by using trend line of a 12 year period.
4. Number of people living with HIV/AIDS in 2007 based on UNAIDS 2007 Epidemiological Updates., Thailand country profile the total number of 580,000 [330,000 – 920,000]
<http://www.unaids.org/en/CountryResponses/Countries/thailand.asp>. Access on Thursday, January 24, 2008

Scope

1. Actual spending/expenditure on HIV/AIDS, not budgeting figures
2. Due to gross lack of data, we did not cover expenditure by local government and domestic private sources, e.g. employers and households out of pocket payment

3. Therefore this estimate only include domestic public sources especially from central government and international sources
4. Fiscal year (October to September) for government expenditure and calendar year (January to December) for international expenditure are treated equivalent
5. Healthcare function applies the 8 items of expenditure proposed by UNGASS template.
6. We omit to impute outpatient care for OI spending due to lack of pattern of outpatient visit of OI after ART period. The reporting figure is only OI spending for inpatient care. Note that before universal access to ARV cost structure between OP and IP for OI patient from 14 hospitals was 70.53% and 29.47% for OP and IP, respectively.
7. We omit to impute PMTCT among pregnant women living with HIV who enrolled with other health insurance schemes, i.e., SSS and CSMBS.
8. External assistances from some agencies are omitted due to the fact that it was no further explanation whether it was approved or disbursed. In addition, they are aggregated amount provided for few years period.

Results

Table 1 background data on healthcare financing

	2007
Population	64,197,000
THE / capita, Baht	3,876
THE/ capita, US\$	115

Background data on healthcare financing indicated that in 2007, Thailand spent 3,876 Baht per capita population, or US\$ 115 per capita (exchange rate 33.7 Baht per US\$), see Table 1.

Table 2 Total AIDS expenditure, 2007

	2007
Total AIDS expenditure, Baht	6,728,020,682
Forecast Total Health Expenditure, Baht	248,852,400,000
Total AIDS expenditure 2007, as	
• per capita population, Baht	105
• per capita PLHA, Baht	11,600
• % GDP	0.08%
• % THE	2.7%

In 2007, the total expenditure on HIV/AIDS was 6.728 billion Thai Baht. This is equivalent to 105 Baht per capita Thai population, or 11,600 Baht per capital PLHA (given the total number of 580,000 PLHA). The total expenditure on HIV/AIDS accounts for 0.081% of GDP in 2007, or equivalent to 2.7% of Total Health Expenditure (THE). See table 2.

Table 3 Total AIDS expenditure by sources of finance and functions, 2007

Type of expenditure\Source of Finance	Total	Percent	Domestic	Percent	International	Percent
1. Prevention Sub-total	949,855,219	14.1%	490,291,815	7.3%	459,563,404	6.8%
2. Care and Treatment	4,830,371,045	71.8%	4,523,505,501	67.2%	306,865,544	4.6%
3. Orphans and Vulnerable Children *	101,296,773	1.5%	91,780,000	1.4%	9,516,773	0.1%
4. Program Management Administration Strengthening	655,446,352	9.7%	337,516,200	5.0%	317,930,152	4.7%
5. Incentive Human Resources**	89,696,764	1.3%	29,870,051	0.4%	59,826,713	0.9%
6. Social protection and social services excluding Orphans and vulnerable Children	3,326,045	0.0%	-	0.0%	3,326,045	0.0%
7. Enabling Environment and community Development	51,050,284	0.8%	45,293,000	0.7%	5,757,284	0.1%
8. Research excluding operational research	46,978,200	0.7%	45,630,600	0.7%	1,347,600	0.0%
Total	6,728,020,682	100.0%	5,563,887,167	82.7%	1,164,133,515	17.3%

On source of financing for expenditure on HIV/AIDS, in 2007, it indicated that domestic public shouldered most of the expenditure, up to 82.7% of TEA, whereas international resources contributed to 17.3% of TEA. This finding indicates better self-reliance on HIV/AIDS program financing, and the Royal Thai Government's firm commitment to the Program.

In the light of the universal access to ART which was adopted by the Royal Thai Government in 2003, a lion share of TEA was spent on care and treatment, up to 71.8% of TEA, where by ARV an OI is accounted for 92% of this function. This followed by prevention, 14.1%, and program administrations, 9.7%. See table 3, in addition, Annex 1 demonstrates details of expenditures.

ANNEX 1 Total Expenditure on HIV/AIDS, by healthcare functions in detail, 2007

Category of healthcare function	Baht	Percent
1. Prevention Sub-total	949,855,219	14.1%
1.1 Mass media	6,322,000	1%
1.2 Community mobilization	10,691,291	
1.3 Voluntary Counselling and Testing	185,240,000	20%
1.4 Program for Vulnerables and special Populations	115,147,373	12%
1.5 Youth in school	46,370,545	5%
1.6 Youth out of school	89,460,554	
1.7 Prevention Program for PLHA	3,764,561	0%
1.8 Programs for sex workers and their clients	9,248,564	1%
1.9 Programs for MSM	8,149,570	1%
1.10 Harm Reduction Programs for IDUs	17,268,414	2%
1.11 Workplace activities	16,611,941	2%
1.12 Condom social marketing	20,220,000	
1.13 Public and Commercial sector condom provision	65,021,724	7%
1.14 Female condom	-	
1.15 Microbicides	-	
1.16 Improving management of STIs	2,465,000	0%
1.17 Prevention of mother-to-child transmission	119,348,682	13%
1.18 Blood safety	-	
1.19 Post-exposure prophylaxis	-	
1.20 Safe medical injections	-	
1.21 Male Circumcision	-	
1.22 Universal Precautions	-	
1.99 Others / Not-elsewhere Classified	234,525,000	25%
2. Care and Treatment (Sub-Total)	4,830,371,045	71.8%
2.1 Outpatient care	-	
2.2 Provider initiate testing	-	
2.3 Opportunistic Infection (OI) Prophylaxis	3,441,282	0%
2.4 Antiretroviral therapy	3,155,178,114	65%
2.5 Nutritional Support	61,440,000	1%
2.6 Specific HIV Laboratory monitoring	134,583,187	3%
2.7 Dental Care	-	
2.8 Psychological care	4,342,136	
2.9 Palliative Care	-	
2.10 Home-based Care	12,975,848	
2.11 Additional / Informal provider	30,832,197	
2.12 In-patient Care	-	
2.13 Opportunistic Infection (OI) Treatment	1,283,171,998	27%
2.99 Others / Not-elsewhere Classified	144,406,283	3%
3. Orphans and Vulnerable Children *	101,296,773	1.5%
3.1 Education	-	
3.2 Basic health care	2,947,661	
3.3 Family / Home support	-	
3.4 Community Support	6,569,112	
3.5 Administrative Cost	-	
3.99 Others / Not-elsewhere Classified	91,780,000	
4. Program Management Administration Strengthening	655,446,352	9.7%
4.1 Programme Management	368,954,802	
4.2 Planning and coordination	1,454,522	
4.3 Monitoring and Evaluation	50,910,637	
4.4 Operation Research	139,875,965	
4.5 Sero-Surveillance	6,750,000	
4.6 HIV drug- resistance surveillance	-	
4.7 Drug Supply systems	-	
4.8 Information technology	1,174,679	
4.9 Supervision of Personnel	-	
4.10 Upgrading Laboratory infrastructure	80,112,604	
4.11 Construction of new Health centres	-	

Category of healthcare function	Baht	Percent
4.99 Others / Not-elsewhere Classified	6,213,143	
5. Incentive Human Resources** (Sub-total)	89,696,764	1.3%
5.1 Monetary incentive for physicians	-	
5.2 Monetary incentive for nurses	-	
5.3 Monetary incentive for other staffs	-	
5.4 Formative education and build-up of an AIDS Workforce	5,671,000	
5.5 Training	28,443,408	
5.99 Others / Not-elsewhere Classified	55,582,356	
6. Social protection and social services excluding Orphans and vulnerable Children(sub-total)	3,326,045	0.05%
6.1 Monetary Benefits	-	
6.2 In-Kind Benefits	-	
6.3 Social services	-	
6.4 Income generation	3,326,045	
6.99 Others / Not-elsewhere Classified	-	
7. Enabling Environment and community Development	51,050,284	0.8%
7.1 Advocacy and Strategic Communication	2,680,927	
7.2 Human Rights	3,250,000	
7.3 AIDS-specific institutional development	5,119,357	
7.4 AIDS - specific program involving woman	-	
7.99 Others / Not-elsewhere Classified	40,000,000	
8. Research excluding operational research (sub-total)	46,978,200	0.7%
8.1 Biomedical Research	28,561,700	
8.2 Clinical Research	17,068,900	
8.3 Epidemiological Research	-	
8.4 Social science research	-	
8.5 Behavioural research	1,347,600	
8.6 Research in economics	-	
8.7 Research capacity strengthening	-	
8.8 Vaccine related research	-	
8.99 Others / Not-elsewhere Classified	-	
GRAND TOTAL	6,728,020,682	100%

Annex 2 Methodological approaches for imputation of some spending items

1. ART treatment

Thailand launched universal access to ARV since 2003. Thus, all Thai citizens who are living with HIV who are covered by universal health insurance scheme are entitled to ARV treatment. The National Health Insurance Office or NHSO purchased ARV from the Government Pharmaceutical Organization (GPO). NHSO estimated that the Organization spent 19,320 baht/person/year for basic regimen, and approximately 64,800 baht/person/year for PLWHA who developed drug resistant and required to switch regimen. The office also reported that 8.3% of PLWHA who received basic regimen need to switch treatment regimen due to drug resistant. This average cost and percentage of drug resistant are used to impute for spending on ART treatment by other public health insurance schemes. Number of people living with HIV/AIDS under each public health insurance schemes, cost of treatment and amount of spending are provided in table below.

Public health insurance scheme	No. of Patient received ARV	No. Of Patients who need 2nd line regimen	Total Spending (million baht)
NHSO	88,021	7,306	2,032.83
SSS	27,861	2,312	643.44
CSMBS	9,890	821	228.41

2. OI treatment

NHSO provided the working group, total in-patients spending on all type of OI treatment, including number of patients, amount by type of OI, and per capita charge weighted by DRG. These valuable numbers enable the team to impute for in-patient spending on OI by other health insurance schemes, i.e., SSS and CSMBS, as provided in Table below, with an assumption that pattern of OI incidence is the same for PLWHA enrolled with SSS and CSMBS. However, the team omits to impute for out-patient care for OI, due to lack of information on outpatient visit among PLWHA in post ART era. Thus, NASA 2007 underestimates OI spending.

Type of OI	No. of OI patients under UC scheme	Total Charge (Thai baht)	Charge/patient (baht)
Mycobacterium tuberculosis, Plumonary or Extrapulmonary	8,662	114,427,756	13,210
Pneumocystis carinii	7,032	88,959,928	12,651
Cryptococcosis	984	20,822,952	21,162
Candidasis (Trachea, bronchi) or lung	574	5,323,904	9,275
Wasting sysdrome (emaciation, slim disease)	160	1,186,968	7,419
MAC	27	1,099,962	40,739
CMV	11	302,409	27,492
PLWHA who seek care for other diseases	52,400	665,898,594	12,708

Type of OI	No of OI Patients		Total Charge (baht)	
	SSS	CSMBS	SSS	CSMBS
Mycobacterium tuberculosis, Plumonary or Extrapulmonary	2,742	973	36,219,444	12,857,051

Pneumocystis carinii	2,226	790	28,158,196	9,995,498
Cryptococcosis	311	111	6,591,021	2,339,658
Candidiasis (Trachea, bronchi) or lung	182	64	1,685,158	598,191
Wasting syndrome (emaciation, slim disease)	51	18	375,707	133,367
MAC	9	3	348,167	123,591
CMV	3	1	95,721	33,979
PLWHA who seek care for other diseases	16,586	5,888	210,774,710	74,820,067

3. Spending on Specific HIV Laboratory monitoring

NHSO provided the working group, a six-month spending on laboratory monitoring. Its total amount of 90,383,810 million baht includes CD4 count, viral load test and drug resistant test. Such amount was divided by total number of PLWHA who received ART, then times two for one year spending on laboratory monitoring per person. This product is used to impute for spending on laboratory monitoring by other health insurance schemes, i.e., SSS and CSMBS.