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NATIONAL AIDS COMMITTEE

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Thailand National Operational Plan Accelerating Ending AIDS 2015-2019

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Foreword

Thailand has been successful in preventing and controlling the HIV/AIDS epidemic during the previous 3 decades. Its HIV/AIDS success stories are acknowledged worldwide, for instance, 100 percent condom use promotion, prevention of mother to child transmission of HIV, expansion of anti-retroviral treatment coverage, HIV vaccine research, effective partnerships with civil society organizations and PLHIV networks for improvement of HIV/ AIDS care and treatment services.

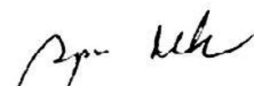
At present, new HIV infections and AIDS deaths have greatly decreased compared to the situation earlier. However, HIV/AIDS is still a challenge for public health and social security, in Thailand and in the whole world. In 2014, the estimated PLHIV cases are 446,154 cases. Out of this estimated figure, 438,629 cases are adults and 7,525 cases are children aged less than 15 years. The estimated new adult HIV infection cases are 7,695 cases and 104 cases of the new children HIV infections annually or in total about 22 new HIV infection cases per day. These infections are entirely preventable and we have the means and knowledge to reduce these to negligible levels. It is our duty to ensure that we continue to provide a focused, effective and equitable response, not only to control but to end AIDS epidemics.

During the UN assembly in 2011, world leaders made a promise to the prevention and control of HIV and were committed in getting to 3 zeroes: 1) Zero new HIV infections; 2) Zero deaths from AIDS; and 3) Zero stigma and discrimination. The challenging goal was set to cut by half new HIV infections by 2015 which would lead to the success of ending AIDS epidemic by 2030. Abiding by this promise, Thailand was committed itself to ending the AIDS epidemic by 2030. Our goal is that vertical transmission should be virtually zero; the number of new HIV infections among adults should be fewer than 1,000 cases per year; all people living with HIV have access to ART services; and there is no stigma and discrimination against people living with HIV and key populations.

At the National AIDS Committee meeting conducted on November 28, 2014, Ending AIDS was set as a national target and all organizations at the central, regional and local levels share responsibility for meeting this goal. In order to support the implementation of the Ending AIDS Policy, the health and community service system will be strengthened by integration of treatment and prevention services using the approach of Reach, Recruit, Test, Treat, and Retain (RRTTR) among key populations.

With joint hands among all concerned parties and multi-sectors, Thailand can be one among the first countries in the world to successfully end AIDS by 2030. The current government policy under the administration of the Prime Minister General Prayuth Chan-Ocha strongly support the improvement of the quality public health care services, reducing social inequality and increasing equal access to the government supported services for health promotion and people’s quality of life improvement which leading to the national sustainable development.

In order to translate our goals to action, the Department of Disease Control as the secretariat of the National AIDS Committee in collaboration with stakeholders from government and civil society organizations as well as academic and development partners had produced an Operational Plan for Accelerating Ending AIDS. This plan clearly lays out key actions, service packages, budgets and geographical priorities to guide the activities of national and provincial level organisations. It is based on the National AIDS Strategy (2014-2016) and is fully in line with international good practice in the field of HIV. Most importantly, this Plan has been developed in strong consultation with affected communities, PLHIV, service providers, and other relevant agencies. I strongly urge all government agencies, community organizations and development partners to throw their full weight behind the implementation of this Plan and make Thailand the first country to End AIDS by 2030 in our region.



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The core team involved in the development of this Operational Plan with technical support from UNAIDS, WHO, Thai MOPH-US CDC Collaboration (TUC) together with many individuals came together to participate in working groups charged with identifying core activities required to achieve the goals of the National AIDS Strategy. The list of participants of the Working Group is available in Annex 6.

AEM	AIDS Epidemic Model
ART	Antiretroviral therapy
BATS	Bureau of AIDS, Tuberculosis and Sexually Transmitted Infection
BCC	Behavioral change communication
CBO	Community-based organization
DDC	Department of Disease Control (of Thailand)
DiC	drop-in-center
FSW	Female sex worker
GF	Global Fund to Fight AIDS, TB and Malaria
HCT	HIV counseling and testing
HIV	Human Immunodeficiency Virus
HMIS	Health management information system
IPSR	Institute for Population and Social Research
KPIs	Key performance indicators
KPs	Key populations
MMT	methadone maintenance therapy
MSM	men who have sex with men
MSW	male sex worker
NAMc	National AIDS Management Center
NGO	non-governmental organization
NHSO	National Health Security Office
PEP	Post exposure prophylaxis
PLHIV	people living with HIV
PrEP	Pre exposure prophylaxis
PWID	people who inject drugs
RIHIS	Routine Integrated HIV Information System
RRTTR	Reach recruit test treat retain
RTMMIS	Real Time Monitoring and Management Information System
S&D	stigma and discrimination

The HIV epidemic in Thailand is mature, declining, concentrated primarily in key populations (KPs) of men who have sex with men (MSM), male and female sex workers (MSWs and FSWs), and transgender people (TG), people who inject drugs (PWID) as well as other vulnerable populations including spouses of KP and PLHIV, migrant workers (MWs) and prisoners. The prevailing mode of transmission is through unprotected sex (90%), with unsafe injecting drug use as a second most important transmission route. Mother to child transmission has been effectively controlled, and the country plans to achieve elimination of this form of transmission by 2020 and ending AIDS by 2030.

This document represents Thailand's comprehensive Operational Plan to Accelerate Ending AIDS by 2030, and is focused on the period 2015 to 2019.The actions and interventions outlined here translate the key concepts presented in the current National AIDS Strategy (2014-2016) into an actionable Plan for Ending AIDS in Thailand. This Operational Plan does not replace the Strategy document, but rather adds value, by translating new scientific evidence that became available in 2012-2013 into programmatic action. With the aim of fully utilizing this new evidence, the Operational Plan consolidates and refocuses key interventions among key populations (KPs) in high priority geographical sites, with the specific purpose of addressing gaps between the current response and a targeted, optimized response needed to achieve Thailand's goal of ending AIDS by 2030.

This Operational Plan sets out a clear framework for service delivery that breaks down the traditional barriers between prevention, treatment and care. It addresses critical gaps in linkages in the system by connecting the five critical components of the prevention, care and treatment continuum. These are 'reach', 'recruit', 'test', 'treat' and 'retain' (RRTTR). It also defines a tailored service packages for each KP, and lays out criteria for the intensity with which services should be delivered at the provincial level. Service packages are categorized into four types: most intensive (package 1), intensive (package 2), specific context based packages (package 3), and basic (package 4).

Based on this prioritization, 11 provinces in Thailand, will receive the most intensive service packages. These provinces will also receive top priority in terms of financing and management. These provinces include: 1) Bangkok, 2) those where HIV prevalence is higher than the national average, 3) those with a large number of target population members (including tourist cities and/or those with universities); and,4) where populations tend to be more mobile. A total of 25 provinces will receive the intensive package for at least one KP or more. Further, 14 provinces, where specific issues relevant to HIV control are in place will receive a package that is comprehensive and tailored. Border provinces and those provinces with documented and emerging risk networks (but low disease burden) will be included. All other provinces (27) in the country will receive basic service package providing information and commodities aimed at the prevention of risk behaviours, and normalization of HIV, and HCT.

Thailand's Operational Plan for Accelerating Ending AIDS has been costed in collaboration with the community and health service providers. The costs have been set out in Section 2 in four key action areas: (i) providing services; (ii) strengthening the system; (iii) enabling the environment; and (iv) programme management. A total programme cost of THB 5,845,037,057 has been calculated, of which 77% is allocated to service delivery; 5% to system strengthening; 5% to enabling environment activities and 13% to program memanagement including monitoring and evaluation. In terms of service delivery costs, 26% of the entire service delivery budget is provided for MSM.

Key actions have been outlined at the national, regional, provincial and service delivery level to ensure consensus generation, two-way communication, coordination, supervision and an appropriate division of responsibilities. A management plan for monitoring the progress of the implementation of the National Operational plan is laid out in Section 3, which sets out overall accountability and management mechanisms for oversight of the Operational Plan. The crucial role of the National AIDS Committee as the apex body for oversight and policy decisions is maintained, while overall implementation responsibility sits with BATS, NAMc and other agencies.

Finally, this Operational Plan defines the process for the monitoring and tracking of key results of each key operational approach based on the RRTTR framework in Section 4. The proposed operational indicators are aligned with those articulated in the current National M&E Plan, but some adjustments have been made. Detailed costing and the M&E plan are presented in the Annex 5.

Purpose of the National Operational Plan

This document represents Thailand's comprehensive operational plan to accelerate Ending AIDS by 2030, and is focused on the period 2015 to 2019. This Plan is meant to guide the actions not only of the Ministry of Public Health (MoPH), but also all decision-makers and implementers within the Government, and in the non-governmental sector, both national and international, whose duties or mandates are related to AIDS control. It should also serve as principal guide for funding agencies considering investment for HIV/AIDS control in Thailand during the same period.

The actions and interventions outlined here translate the key concepts presented in the current National AIDS Strategy: NAS (2014-2016) into an actionable Plan for Ending AIDS in Thailand. This Operational Plan does not replace the Strategy documents in any manner, but rather adds value, by translating new scientific evidence that became available in 2012-2013 into programmatic action. With the aim of fully utilizing this new evidence, the Operational Plan consolidates and refocuses key interventions among key populations (KPs) in high priority geographical sites, with the specific aim of addressing gaps between the current response and a targeted, optimized response needed to achieve Thailand's goal of ending AIDS by 2030.

Focused on enabling systems and addressing current gaps, this document adds value by introducing innovation for high coverage service delivery - one which targets not only on the populations at highest risk, but also those geographical areas with the highest HIV burden across the entire continuum of prevention, care and treatment.

The Plan also links closely with the National Tuberculosis Strategic Plan (2015-2019), and highlights areas where these two national programmes can collaborate and increase their efficiency in terms of service delivery for better outcomes and impact.

Key principles and foundations on which the Plan is built

The Operational Plan for Accelerating Ending AIDS uses the NAS (2014-2016) as the guiding framework. The Thai NAS takes two over-arching strategic directions; (i) innovation and change; and (ii) optimization and consolidation. The NAS (2014-2016) is based on the principles of promoting equality; implementation of people-centered approaches; clear target setting; creating national ownership and leadership; empowerment and increasing self-esteem; and working in partnership with government, private and non-governmental sectors. The focus remains on vulnerable populations of MSM, TG, MSW, PWID, FSW and their clients in this strategy.

The NAS (2014-2016) sets ambitious targets: (i) new HIV infections reduced by two-thirds; (ii) vertical transmission of HIV less than 2%; (iii) universal access to social protection and quality care and treatment for PLHIV; (iv) AIDS related deaths reduced by 50%; (v) TB deaths

among PLHIV reduced by 50%; (vi) laws and policies which impede access to prevention, treatment and care and other government health services revised; (vii) human rights and gender specific needs are addressed in all HIV responses; and (viii) number of discrimination and /or human rights violation cases occurring to PLHIV and KPs reduced by 50%.

Additional main inputs for this Operational Plan are drawn from the National Consultation on Strategic Use of ARVs (August 2012), Evaluation of the National HIV Prevention Programme for Key Affected Populations and Prisoners in Thailand by Institute for Population and Social Research (IPSR) in 2013; and the National Consultation on Ending AIDS in Thailand through Evidence-based Responses (March 2013). Finally, results of initial cost benefit analysis (2013), which indicated that Ending AIDS using a combination prevention approach is feasible in Thailand, were also used to develop this Operational Plan.

Based on a review of the evaluations supported by the National AIDS Committee and the GFATM, recommendations to address current gaps in the Thai national response can be categorized across three areas:

1) Targeting of higher risk populations and higher risk geographical areas will increase efficiency and likelihood of success. Given the nature of Thailand's HIV epidemic evaluations have demonstrated that a lack of targeting at both the population and geographic level dilute the national effort to control HIV. As Thailand moves from an approach to control HIV to one of ending AIDS, targeting interventions at those who have the highest risk, within the geographical areas in which they are found, will have the desired impact.

2) Innovative and effective interventions are needed. Coverage among KPs remains low as a result of low HCT uptake and late ARV initiation. New approaches to outreach and other interventions aimed at reaching, recruiting, and retaining, KPs into the prevention, care and treatment continuum are needed.

3) More effective, innovative monitoring approaches are needed, and system-related barriers need to be addressed. While Thailand has a solid foundation of evidence to guide the response, the introduction of innovation in service delivery will require strengthening of the programme's ability to track individuals and engage other sectors effectively who work directly with KPs. The country's health management information system (HMIS) needs to gather data that can be disaggregated by KPs, in order to track individuals as they move through the prevention, care and treatment cascade.

In addition, policies and guidelines need to be reviewed and updated to address new service delivery models (i.e., rapid, same day result testing, decentralization and the required task shifting for this to occur). Laws related to the age of consent for testing and criminalize certain behaviours (such as substance use and selling of sex), need to be reviewed and interpreted in ways that support public health goals. While significant capacity building has been done, more is needed to assure providers are aware of current good practice and evidence, and that they deliver KP-friendly services.

Key components of the National Operational Plan

This Operational Plan has four key components. Section 1 is the Core Plan, which lays out the background and rationale to Thailand's efforts to End AIDS and outlines key operational objectives and strategic interventions. It sets out key targets and approaches, including how innovation and efficiency will be achieved while delivering high coverage services in a gender sensitive and human rights based framework. Section 2 lays out the approach to costing Ending AIDS in Thailand. It lays out how costs were calculated not just by intervention but by actual costs of service delivery on the ground. It also sets out budgets by package of services for each key affected population. Section 3 outlines key actions, proposed activities and timelines which form the backbone of the Action Plan for Ending AIDS in Thailand. Critical activities for enabling systems and developing capacity are proposed for the period 2015-2017 by quarter. These will be reviewed annually and adjusted as required. This section also provides information on the management and oversight of the Operational Plan. Section 4 outlines how the Operational Plan will be monitored, and sets out key tracking and monitoring indicators, as well as how the M&E systems will be strengthened.

The process of assembling the Operational Plan

As the secretariat of the National AIDS Committee, the Department of Disease Control by the NAMc and BATS coordinated the development of the Operational Plan, involving a series of working group meetings around key strategic areas (prevention, care and treatment, strategic information, stigma and discrimination) and broader stakeholder workshops. Working groups were tasked with reviewing the current plan, reviewing programme assessments and evaluations, and identifying partner comparative advantages in order to develop an actionable list of interventions that would overcome the gap between what is currently being implemented, and what needs to be implemented in order to achieve the goals of the three zeroes.

Working groups reached consensus and their inputs were integrated into the plan prior to hosting a larger national stakeholder workshop to review the proposed interventions. The Plan has been proposed to the National AIDS Committee for approval as well as consideration on moving the Plan to the implementation.

1. Core Plan

Background

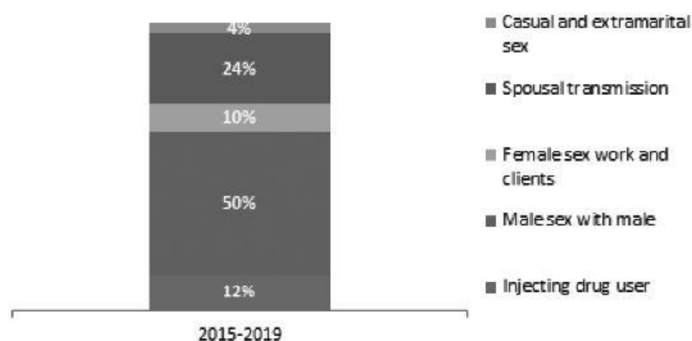
Current HIV Epidemiology

The HIV epidemic is mature, declining, concentrated primarily in key populations (KPs), i.e. men who have sex with men (MSM), male and female sex workers (MSW and FSW), transgender people (TG), people who inject drugs (PWID) as well as other vulnerable populations including spouses of KP and PLHIV, migrant workers (MW) and prisoners. The prevailing mode of transmission is through unprotected sex (90%), with unsafe injecting drug use as a second most important transmission route. Mother to child transmission has been effectively controlled. Most of the new infections occur in one-thirds of provinces, including Bangkok.

The HIV epidemic is mature and rapidly declining since 1992. There were an estimated 459,688 people living with HIV in Thailand in 2013, including 193,965 women and 8,830 children (AIDS Epidemic Model, 2013 estimation). The estimated adult HIV prevalence was 1.1%.

Figure 1: Transmission modes for new HIV infections in Thailand (2015-2019)

Projeded New HIV Infections by Mode of Transmission
Thailand: 2015-2019



Source: Thai working group on estimation and projection, 2013

There were an estimated 8,135 adult new infections in 2013, of which 3,448 were among MSM; 2,572 were through spousal transmission; 799 were among PWID and 968 infections occurred among FSWs and their clients. Casual and extra-marital sex led to 348 new infections.

The Thai Working Group on HIV and Estimation and Projection in 2013, has confirmed that HIV in Thailand will remain concentrated among key populations (KPs) during 2015-2019. Nearly three-quarters of the new infections will be among MSM and sero-discordant spouses (see Figure 1). PWID and FSWs and their clients make up the vast majority of the remaining new infections.

The transmission of HIV from parents to children has been successfully controlled; mother to child transmission (MTCT) rate was at below 2.3% in 2013. AIDS-related deaths have been steadily decreasing since 2001, with a sharp decline from 2006, following the scale up of ART

Table 1: Estimated number of new infections (adults), by mode of transmission (2015-2019)

Year	PWID	MSM	FSW and clients	Spousal transmission	Casual and extramarital sex	Total
2015	815	3,418	793	2,000	298	7,325
2016	819	3,405	723	1,788	277	7,012
2017	821	3,394	663	1,615	258	6,752
2018	823	3,385	610	1,474	242	6,534
2019	825	3,376	563	1,356	227	6,347
2013-2019	4,103	16,978	3,352	8,234	1,302	33,970
%	12%	50%	10%	24%	4%	100%

Source: Thai working group on estimation and projection, 2013.

Projections of new infections (adults) over the next five year period show that in the absence of any interventions, nearly 34,000 new infections will occur of which half will be among MSM and a quarter among sero-discordant partners.

Apart from the KPs mentioned above, sex related HIV risk behaviors are noted in migrant populations such as fishermen and those working in the sea food processing industry. For MWs, the IBBS in 2012 showed low HIV prevalence but high levels of risk behaviors (15% males reported having sex with more than one partner in the last year). In a behavioral survey conducted in 24 provinces among MWs aged 15-49 years, 21.6% of male workers had sex with more than one partner in the previous year compared with 4.6% female workers. Fishermen and those working in the sea-food processing industry often pay for sex. For example, in one study in Ranong province in 2008, just over 60% of fishermen reported having had sex with a sex worker, and among them 72% reported consistent condom use during paid sex encounters (Htoo, 2009).

Antiretroviral Therapy

Thailand has made outstanding gains in making HIV treatment accessible to all those who need it. Coverage with anti-retroviral treatment (ART) is high at 80% (CD4 350 cell/mm^3 and below). However, entry into treatment is late; people living with HIV (PLHIV) initiating ART have low CD4 counts (median of 111 in 2013), and 67% of newly initiated on ART had CD4 counts under 200 cell/mm^3. This has implications not just for individual health outcomes but for ongoing transmission. Retention rates for PLHIV in the treatment system at 12 and 24 months were 83% and 79% respectively, while the mortality rates were 8% and 11% respectively (Thailand GARP Report, 2014).

Uptake of HCT among KPs is limited. For example, only 25.6% MSM and 43% PWID reported being tested and knowing their results in the preceding 12 months (IBBS, 2012). Of the estimated 459,688 people living with HIV (AEM, 2013), 388,833 are registered for care. At least, 62,425 people are yet to be diagnosed and linked into care, and intensified HCT in community settings is essential to meeting this objective. Despite considerable progress in

reaching and delivering HIV prevention and treatment services to these individuals, programmes continue to struggle with access to some of these populations (e.g. PWID), and residual risk behaviors continue. An important tool in reducing transmission will be to ensure early diagnosis and high quality ART. As most new infections continue to be among KPs, the focus of HCT needs to remain on this population and their sex partners.

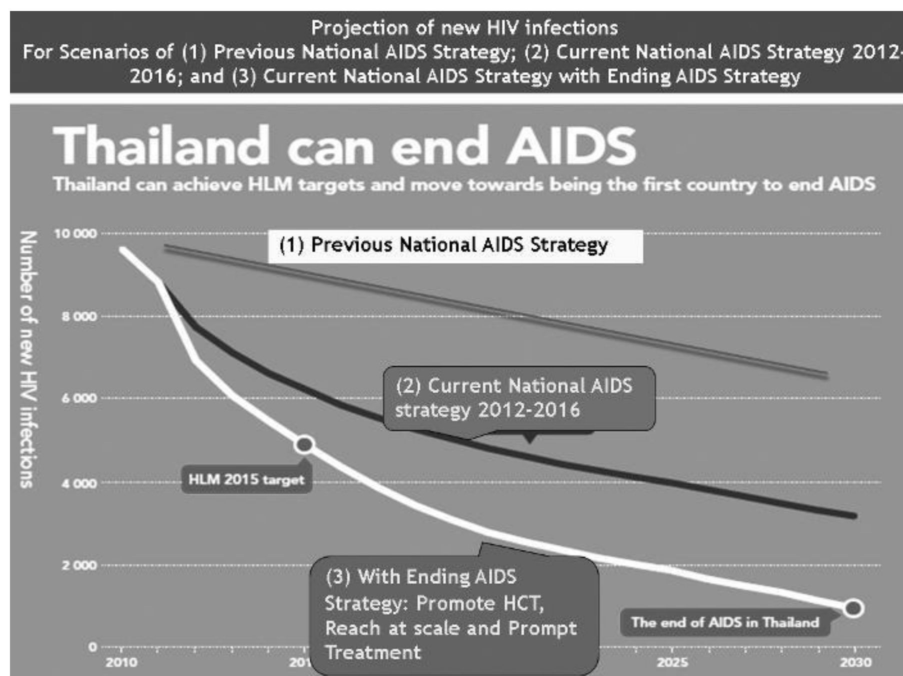
Analysis of the treatment cascade shows inadequate linkage between diagnosis and treatment and care, and insufficient retention across the prevention and care continuum. This partly due to the passive nature of health care delivery for HIV patients, and services being limited to provincial and tertiary health care settings, where staff have limited time and resources to follow-up and support adherence among patients. At the same time, inadequate linkages between health care and community settings, and inadequate patient tracking mechanisms between community based organizations (CSOs) and traditional public sector health facilities contributes to reduced retention across the prevention and care continuum.

For example, of the 331,357 individuals who met ART criteria (among the 388,833 people registered for HIV care), 286,214 commenced ART (86.4%) in 2012. Due to 'loss to follow up' and mortality among these, 227,451 continued treatment in 2013 (79.5%). Among the175, 804 who had a viral load test done in the last year, 155,221 had a suppressed viral load. In other words, there was 32% attrition between those who should have been on ART, and those who are actually on ART. A comparison of those who are registered for HIV care, versus those who are currently receiving ART, shows a significant 'leakage' in the treatment cascade (42%). Therefore, it is an urgent priority in Thailand to ensure early treatment and improved adherence to control transmission at a population level, as well as improve individual health outcomes.

The 2015-2019 Operational Plan for Accelerating Ending AIDS in Thailand

As an upper middle income country, with universal health coverage and a relatively small number of new infections each year, Thailand is uniquely positioned to end the AIDS epidemic. Epidemiological modeling in Thailand indicates that saturating KPs with a high coverage of HCT and initiating treatment irrespective of CD4 count is an effective strategy for minimizing new infections (see Figure 2). By focusing offering HCT in KPs and reaching 90% of them, Thailand can actively find HIV patients and support them with early treatment and care. This will be beneficial not only for their health, but will also lead to an overall reduction in the 'community viral load'. Cost effectiveness analysis has shown that it is feasible to scale-up this approach for a relatively small additional cost (UNAIDS, Investment Case for Thailand, 2013). This Operational Plan outlines the activities that Thailand will implement over the next five years which **address the gap between the current response and the optimized response needed to effectively End AIDS in Thailand** by 2030 (see Figure 2).

Figure 2: Projection of new HIV infections for Scenarios of (1) Previous National AIDS Strategy; (2) Current National AIDS Strategy 2012-2016; and (3) Current National AIDS Strategy with Ending AIDS Strategy



Vision of Operational Plan

Zero new HIV infections, zero AIDS-related deaths, and zero stigma and discrimination

Goals

To end the AIDS epidemic in Thailand by reducing annual new HIV infections to less than 1,000 by 2030; and to virtually eliminate the transmission of parent to child transmission of HIV by 2020; and ensure that all diagnosed PLHIV receive ART upon diagnosis to improve the quality of their lives and prevent transmission to others

Targets for Ending AIDS

The key operational targets in order to achieve these goals for the period 2015-2019 are set out in Table 2 below. Ending AIDS targets have been articulated for this period in terms of new HIV infections averted (2,602 new infections as opposed to 6,347 new infections which would occur if current approaches and interventions were followed) , AIDS related deaths averted (13,682 new AIDS related deaths in 2019 as opposed to 15,794 which would occur if early treatment /irrespective of CD4 count is not provided), roll-out of the RRTTR framework at high coverage for KPs, effective viral load suppression (to prevent onward transmission within networks and communities), and reduction in stigma in health facility staff (with 10% or less stigma documented in health care facilities).

Table 2: Targets for Ending AIDS 2015-2019

Targets: Thailand's Ending AIDS 2015-1019							
	Baseline 2012-13	2014	2015	2016	2017	2018	2019
Estimated new HIV infections (adults)							
Current effort (Baseline)	8,134	7,695	7,324	7,012	6,752	6,537	6,347
Ending AIDS			6,290	4,646	3,813	3,139	2,602
Cumulative HIV infections averted	-	-	1,034	3,400	6,339	9,737	13,482
Estimated percentage of child infections from HIV- infected women delivering in the past 12 months							
Thai and Non Thais pregnant women	2.3%	2.2%	2.0%	<2.0	<2.0	<2.0	<2.0
Estimated AIDS-related deaths							
Current effort (Baseline)	20,962	20,325	19,246	18,182	17,258	16,472	15,794
Ending AIDS			17,761	16,321	15,502	14,639	13,682
Cumulative AIDS-related deaths averted			1,485	3,346	5,102	6,935	9,047
Stigma and Discrimination							
Observed stigma among heath facility staff	NA	23%			13%		10%

Key new directions for the Operational Plan 2015-2019

The National Operational Plan (2015-2019) focuses on 30 priority provinces, with the most intense focus on the Greater Bangkok Area (where modeling and epidemiological studies suggest that nearly a quarter of new infections are occurring. The Plan focuses on leveraging the preventive effects of ART that will further contribute to a decline in new infections. The Framework for this Operational Plan is based on the Reach-Recruit-Test-Treat-Retain, which closes the gaps in the prevention and treatment cascade, and helps to break down the dichotomy between prevention and treatment (that has been noted in programme evaluations as an issue in the Thai national HIV response).

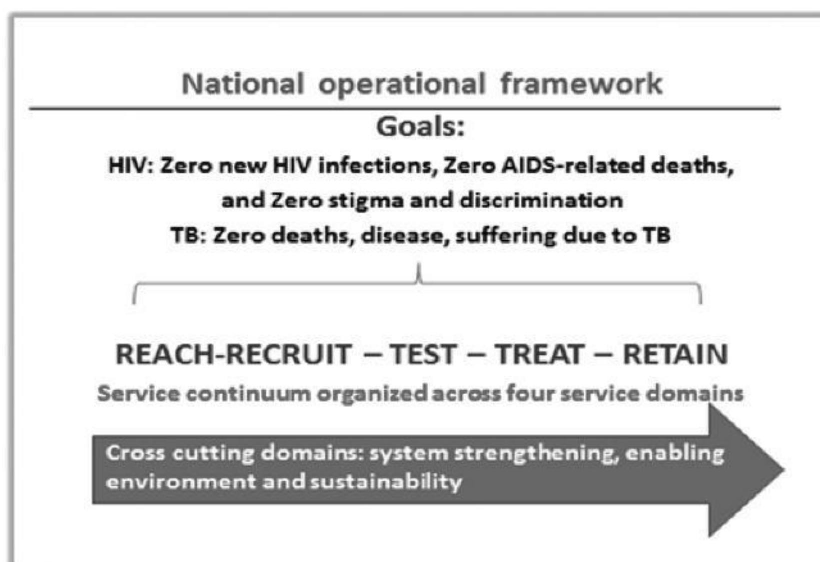
Reach-Recruit-Test-Treat-Retain

Given very high reported rates of ‘last time’ condom use and sterile injecting during the last five years, there are concerns that a saturation point may have been reached for behavioural interventions in Thailand. Specifically, while the proportions among KPs who report safe behaviors are high, the rates of HIV counseling and testing (HCT) are typically low. Despite HCT being provided as part of universal health coverage to all Thai nationals, uptake is poor.

In addition to saturation levels being achieved in behavioral change, and limited HCT, Thailand needs to address transmission among sero-discordant couples (over a third of new infections are estimated in this population). Targeted provision of HCT to this population in and out of PMTCT settings, and the provision of early ART to the infected partner will be fundamental to controlling transmission in this group.

In order to action this, there is a realization that one needs to move beyond the provision of health 'hard-ware' and information, to actual service provision by taking a more active and 'case-finding' approach, with adequate linkages to treatment initiation and retention. Thailand now needs to introduce a new form of 'combination prevention', with a strong focus on community led approaches to identify the most at risk KPs (such as younger MSM). Innovation in outreach service delivery models and demand creation for HCT, with tight linkages into early initiation of ART and adherence support are also vital.

Figure 3: Framework of the Thai National Operational Plan



Acknowledging the need for targeting at both the population and geographical level, this plan uses a five-pronged strategic approach focused on **reaching** high risk populations, **recruiting** those at highest risk into prevention, care, and treatment services ; **testing** those at risk ; **treating** all those found positive regardless of CD4 levels ; and **retaining** both negative and positive KPs in the prevention, care, and treatment continuum. The Reach-Recruit-Test-Treat- Retain (RRTTR) approach to HIV diagnosis and treatment is in line with the WHO endorsed approach to HIV diagnosis and treatment using a cascade approach. The RRTTR approach also has direct relevance to the control of TB in Thailand, as early detection and universal quality treatment of co-infected patients will contribute to decreased incidence of TB. On the basis of this analysis Thailand has revised its current ART guidelines to ensure ART for all HIV patients irrespective of CD4 cell count.

Reaching

Key gaps in reaching : Thailand has had a large outreach programme which has successfully reached out to KPs in community settings to provide information and health 'hardware'. Condoms and IEC materials have been successfully provided at a large scale as part of these outreach efforts. However, the focus on promotion of HIV testing was limited. Outreach activities also focused on face to face communication only, and were not designed to use the many opportunities offered by social media and mobile phone technology.

Core principles : As part of Thailand's Ending AIDS response, a new strategic approach to 'reaching' KPs will be adopted with the dual objective of demand creation (for HCT) and continue to provide health hardware such as condoms, and access to needles/syringes and essential prevention education.

Informing our approach : Effective reaching will be informed by community mapping which will help understand population segments and their motivations for adopting desired health care seeking behaviors and their fears related to seeking prevention services.

Community mapping will inform communication strategies that will develop targeted messaging that is appropriate and relevant to population segments. KP-specific outreach, including DiCs, will become geographically and population specific.

Demand creation will be the foundation of targeted behavior change communication (BCC) approaches. Activities to support demand generation for comprehensive prevention and care services include : (a) mobilizing social networks via peer led outreach interventions (traditional and network based using incentives as well as revitalized Drop in centers) providing information and referrals to both HIV and TB diagnosis services ; (b) targeted social and public media, (c) pharmacy network creation to provide clients with a wider access to HIV information, including locations where HIV testing is done ; (d) using gatekeepers such as entertainment venue managers to disseminate messaging, and (e) developing frontline health care facilities at the sub-district level to promote HIV awareness and uptake of HCT as well as TB testing services.

Reaching at a glance

Outcomes : increased risk perception; consistently use of condoms; safe injection; increased knowledge about the importance of testing, the benefits of ART and STI screening and case management; increases in intention to HCT; increased knowledge about service availability

Core principles : Reaching KP at higher risk in priority sites to create demand for HCT and STI services

Key innovations : Scaling up reaching KPs through their social networks and use social media including websites, group as well as individual electronic communication. Create pharmacy network as the outlet for HIV information and where to get the HCT services.

A more **targeted approach** will be used to reach KPs through the intensive and comprehensive packages which will be guided by the use of social marketing approaches that will provide evidence related to the specific content desired and the most relevant outlets for these messages to be disseminated. Websites where MSM and sex workers chat on line and seek partners, social media such as Facebook, to saturate KPs with strategic messaging to assure: (1) KPs are aware of their risk levels, (2) generate demand for routine HCT, (3) people know where to access services (including MMT and needle exchange services for PWID), and (4) KPs understand the benefits of STI screening and management, and early ART treatment.

Under **commodity distribution,** focus will be on assuring availability and accessibility to condoms, water based lubricants, and needles and syringes (for PWIDs). Male and female condoms and water-based lubricants will be distributed during outreach to assure that KPs have these commodities on-hand when needed. There will be an expansion of condom targeted outlets to assure saturation of condoms in targeted geographical areas through vending machines in entertainment venues and pharmacy network members.

Recruiting

Key gaps in recruitment : Even though all Thai citizens are eligible for free HTC, STIs and OST services, the inconvenience and KPs-unfriendly services are main barriers for KPs to be recruited for services. Fear of positive results also brings about the reluctant of KPs to seek for the services.

Core principles : Recruitment of Thai and non-Thai KPs into the prevention, care and treatment continuum will focus on recruitment into the system at scale by using a mix of branding, STI management, and referrals. For PWID this will include the scale up of comprehensive harm reduction including mass distribution of needles and syringes as well as the scale up of opioid substitution therapy (OST).

Branded BCC messaging will be two-folded: **general public awareness** raising across the country using approaches such as public service announcements on TV and radio, posters, and pamphlets.

To increase recruitment for HTC, a peer-driven intervention modified from Respondent Driven Sampling methodology will be used in high priority sites including Bangkok, with more traditional peer outreach in the lower priority provinces.

STI screening and management services, an entry point into HIV services, will be decentralized in those provinces where the intensive and comprehensive packages are implemented. Provided through mobile services at the community level- and strengthened to create branded **user friendly, high quality, and population appropriate services** in order to develop a service network for KPs.

Recruitment at a glance

Outcomes: increased recruitment of target populations to needed services; including pre-HIV test counselling, or STI screening, diagnosis and treatment; or OST

Core principles: Recruitment at scale into pre HIV-test counseling, STI, OST at scale by focusing in priority provinces **and** KPs

Key innovations: Branding of services; peer- driven intervention using incentive schemes and RDS to target those at highest risk; integration of the private sector; online appointment services, QR-code based membership cards.

Service branding will include government and private providers and will increase the availability of KP-friendly services under a mechanism that assures quality and appropriateness of services and messages. Staff will be sensitized in these sites in order to assure appropriate engagement with KP members, through a logo that identifies these sites and informs consumers about the services available these sites will increase the availability of service to KPs throughout the country.

An **enhanced referral system** to branded sites with online appointment making, introduction of QR-based referral, and integration of pharmacy networks by using smart phone applications such as Line. Subsidies will be made available to facilitate accessing services- this includes transportation, and accompanying people to sites (testing buddies). This referral system will include referral to HCT as well as TB sputum testing to branded sites.

Testing

Key gaps in testing : Services are available only at the facility level; perception of stigma and discrimination; lack of widespread availability of same-day result testing services; limited numbers of KP friendly service sites.

Core principles : Under the testing approach efforts will focus on **early diagnosis, regular testing, and decentralized same day result testing.**

HCT services will be expanded to include strengthened hotline-based pre-test counseling; **mobile testing** (intensified in target provinces but periodically in other provinces in an effort to normalize testing among the population at large); and expanding access through making testing available within communities through private and CBO sites **(community-based HCT);** and home testing (operational research in Bangkok). Testing sites that meet established standards will be branded and provider initiated counseling and testing will be strengthened within TB and STI services. Within enclosed settings, pre- and post-test counseling along with self-administered (but supervised) oral testing will be introduced (pilot in selected prisons).Couples counseling to reach partners of KPs will be strengthened through training of counselors on discussing disclosure and ways of encouraging clients to bring in their partners. In addition, efforts will be made to assure pre-test counseling is appropriate for KPs in terms of addressing specific issues the first time they are tested but then tailoring this component of the testing process for those who are re-testing in order tailor messages and content more efficiently. To achieve this new guidelines and SoPs will be developed to assure that counseling is appropriate and that new service sites- private clinics and NGO-sector sites- are able to meet the established standards.

Testing at a glance

Outcomes: Increased HIV (re-) testing coverage, knowledge of sero-status among KPs, and early diagnosis, and also referred for treatment

Core principles: Increased availability at the community level, scale up of same day testing results, and KP friendly services.

Key innovations under testing: Same day rapid testing at the community level through CBOs and mobile sites and within health care facilities; hotline pre-test counselling; operational research on home-based testing; branding of high quality, KP-friendly services.

The Bureau of AIDS TB and STIs will work with hospitals to promote ‘same day result’ HIV testing. This is to reduce attrition and improve patient convenience. As part of Thailand’s End AIDS Strategy, it is planned that HTC with same day results will be further decentralized - to ensure that diagnosis can be achieved at the sub-district level. The recent evolution to include HCT in drop in centers (DiC) run by peers has been successful in increasing testing, but more needs to be done. Traditionally provided by CBOs, these groups have the experience and relationship with KPs to reach them with prevention messages and information on service delivery; they are trusted and the provision of HCT services by these groups has reduced barriers often faced within government sector facilities where concerns over stigma and discrimination and perceptions around service quality and confidentiality are barriers often reported by KPs.

Communication services will focus on the importance of **early testing** within one month of a likely exposure and **promoting retention** within the system regardless of test results. SMS messages and incentive programs will be put into place to encourage retention in the recruit, test, treat and retain continuum. This will involve encouraging KPs to retest every six months and refer them to CBO supported recruitment services, and referring positive people to ART services and support services provided at the community level.

Within government facilities, **holistic care centers** will be strengthened and consideration will be given to patient flows so that clients who are informed about testing services within primary health care services are not lost when moving to different department or service areas to receive an HIV antibody test.

Across the government and NGO/CBO sector a **joint referral system** will be developed including guidelines, tools, and training in order to assure that the system is able to refer clients who are tested at the community level through peer-led interventions and mobile sites can access health care services and for HIV counselors within health care facilities can refer KP who test positive to support services, and those who do not test positive to sites where they can access additional information and receive peer-led support in order to stay negative.
This joint referral system will incorporate TB services in order to assure all HIV positive clients are tested for TB. Through the process decentralizing testing, quality assurance and a functional referral system services can then be **branded and** recruitment efforts can promote service efforts by assuring that HCT services are user friendly, of high quality and meet their needs.

Treating

Key gaps in treatment: lack of knowledge about the effectiveness of ART and fears of costs associated with the treatment of opportunistic infections and laboratory tests; reliance on facility based treatment which may be inconvenient for clients; late uptake which compromises treatment efficacy.

Core principles: Under the treating approach efforts will focus on **early ART initiation, access to treatment for KPs, and task shifting.**

Early identification and initiation of ART, regardless of CD4 levels, is a critical component of Thailand's efforts to eliminate HIV as a public health issue. For discordant couples, early treatment initiation for the positive partner will reduce the likelihood of infecting partners. In order to achieve this delivery systems and case management need to be strengthened through assuring providers are using effective regimens and have the capacity to better manage treatment regimes. Integration of ART into TB and ANC services and incorporating Hepatitis C-related services into HIV programming are core activities under this area.

Treatment at a glance

Outcomes: Higher CD4 at entry into care and early ART initiation among KPs

Core principles: early ART initiation, task sharing and decentralized treatment services for KP-friendly services

Key innovations under treatment:
Task sharing to decentralize ART to sub-districts; Introduction of CD4 at point of service; integration of HIV into TB/HIV and Hep C services; collaboration across insurance schemes to cover treatment costs

Accessibility for KPs of treatment services will involve task shifting and specifically, the decentralization of treatment services to sub district health promotion hospitals. Community networks and PLHIV holistic centers within hospitals will provide KP-friendly services and support adherence, address mental health issues through counseling, and promoting positive living for HIV positive and for co-infected (HIV/TB) persons. Laboratories at lower levels of the health care system will provide point of care ervices, assuring that PLHIV can access CD4 count, viral load testing, and TB diagnostic services closer to their communities. Expansion of laboratory networks to communicate points of care will support increased access for KPs.

Piloting to inform future programming: Task shifting and decentralization of services will be critical to assure treatment services can meet the demand generated under the new program. In order to achieve this, hospitals at the provincial and district levels with large caseloads will be selected to decentralize HIV care and treatment to the sub-district level. Newly initiated patients will be provided with services at the provincial or district level for the first year of care and treatment, after this they will be linked through the service provider networks to a sub-district hospital closer to their community which will then take over future care and treatment needs. Pilot hospitals will be selected within the priority provinces to assess this approach.

Integration of post-exposure prophylaxis (PEP) and pre-exposure prophylaxis (PrEP) into the national response will be tested in Bangkok. These approaches will aim to evaluate how these new approaches can be utilized among those at highest risk of contracting HIV. The project will aim to identify those at highest risk and understand the factors related to this higher level of risk, and then apply this to the piloting of PEP and PrEP into the national response. For those who become positive, a test-and-treat approach will be integrated to assure early initiation of treatment, regardless of CD4 levels.

Retaining

Key gaps in retention: Limited use of new technologies and approaches to encourage treatment adherence; weak linkages at the community level for follow up; reliance on facility-based services which may be inconvenient for clients; lack of follow up for HIV negative KPs.

Core principles: Retaining people within the prevention, care and treatment continuum will need to focus on keeping those found negative engaged in order to not become infected and in assuring that those who are found to the HIV positive adhere to their treatment. For negative individuals the strategic approach will aim to maintain high levels of condom use with different partner types and to assure individuals are periodically re-tested. For positive KPs, retention will focus on assuring a 95% treatment adherence rate and follow up for those individuals who opt out of initiating early treatment.

Key interventions for KPs found to be negative include population specific support networks, **utilization of mobile technology (SMS)** to remind people of the importance to be tested and **enhanced post-test counseling** with targeted messaging which encourages preventive behaviors (operational research will inform this). Innovative approaches used

by the private, for profit sector, will be integrated to strengthen retention activities. Membership cards linked to incentives to promote re-testing will be introduced in order to make health care seeking for these services more attractive to clients.

Positive individuals will be retained through a combination of adherence support services at the community level and within health care facilities. **Treatment literacy** will focus on large scale treatment literacy and empowerment for self-care. Holistic care centers within facilities will be strengthened. Adherence will use mobile technologies like **SMS** to remind clients to take their drugs and clubs will be created to provide support and encouragement to PLHIV. At the **sub-district hospital level** adherence support tools such as pill counts will be strengthened and expanded. A **strengthened referral system** across levels and sectors will assure PLHIV receive the various types of support needed. **Tailor-made case management** for PLHIV who are KPs including reproductive health, TB, sensitization of ART ounselors to KP needs and case management though home and community based support will be created.

Retention at a glance

Outcomes: Viral load suppression, higher retention rates within treatment services, higher levels of re-testing for negative KPs

Core principles: case management at the community level; innovations to promote adherence, retention of negative and positive KPs in the HIV cascade

Key innovations under retention: Leveraging mobile technologies to remind individuals to be re-tested, and for those who are positive, to adhere to their treatment; treatment literacy at scale though a network of trained providers within health care facilities and within the community; case management at the community level.

Priority Populations

Key populations (KPs) and their partners targeted in this Operational Plan include Thai and non-Thais:

- MSM and transgender people (including <18 years of age, who are in and out of school as well);
- Male, female and TG sex workers (venue and non-venue based sex workers; explicit and non-explicit sex workers);
- People who inject drugs (PWID; including MSM/TG/sex workers/prisoners);
- Prisoners and youth in detention centers (including MSM/TG/sex workers/PWID);
- Partners of PLHIV and KPs, and
- High risk migrants, particularly those in professions that make them more likely to practice risky behaviours (such as those working in fisheries, sea food processing).

Interventions will be tailored for these populations, and different approaches as well as service delivery packages for each KP will be delivered at the required intensity and coverage. These interventions, by population and package are detailed in Annex 1. A detailed costed action plan can be found in Annex 5.

Geographic Prioritization

An epidemiological analysis based on disease burden and new infections shows that 30 provinces in Thailand account for 75% of total burden of HIV and 76% of total size of KPs including MSM, TG, MSW, FSW and PWID. The highest burden is in the Bangkok and peri-Bangkok Provinces area. This information allows Thailand the opportunity to really tailor an

efficient and graded response, where the highest intensity and coverage of interventions is aimed at provinces not only where the need is the highest, but where impact is likely to be the highest. Focussing efforts on these provinces gives Thailand the best chance of Ending AIDS.

Figure 4: High HIV burden priority provinces in Thailand

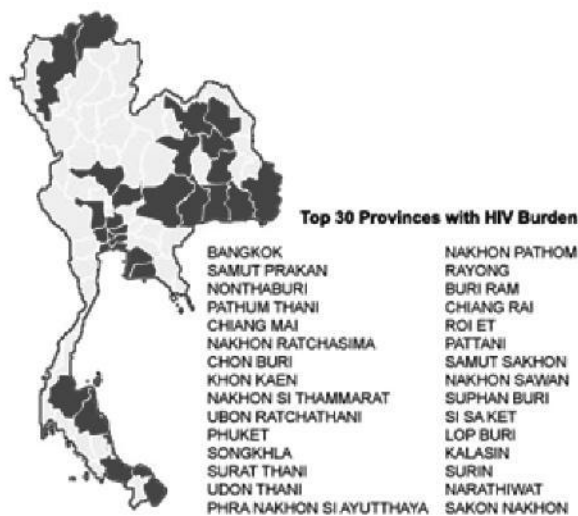


Table 3 shows the coverage that can be achieved (cross tabulated by the nature of service package and key populations) by taking this approach. For example, for TGs, by providing the most intensive service package in 4 provinces, 49% coverage can be achieved. Similarly, 69% of all FSWs can be covered by providing the most intensive service package in 8 provinces alone.

Table 3: Coverage by KPs which can be achieved by focusing on high burden provinces (broken down by intensity of service package).

Packages	Targets	Target populations						
		MSM	TG	MSW	FSW	PWID	Prisoner	Youth in detention centers
Package 1: Most intensive	# provinces	4	4	4	8	5		
	# populations	37,819	13,898	15,672	91,676	14,734		
	% coverage	26%	49%	92%	69%	37%		
Package 2: Intensive	# provinces	10	9		16	8	32	26
	# populations	34,117	4,513		20,131	2,679	210,343	22,421
	% coverage	23%	16%		15%	7%	72%	85%
Package 3: Specific context	# provinces	17	18		14	6		
	# populations	26,464	3,696		9,246	2,910		
	% coverage	18%	13%		7%	7%		
Package 4: Basic	# provinces	46	46		39		45	8
	# populations	47,419	6,425	1,298	11,844	19,978	83,149	3,991
	% coverage	33%	23%	8%	9%	50%	28%	15%
	National pop size estimation	145,819	28,532	16,970	132,896	40,301	293,492	26,412

Based on this prioritization, different intensities of service packages will be delivered in different provinces. Clear criteria for establishing the intensity and the service package for each province have been developed in consultation with the community. These are outlined below in Table 4.

Table 4: Criteria for grouping of provinces for tailoring service delivery packages

Target populations	Package 1: Most intensive	Package 2: Intensive	Package 3: Specific context
MSM and TG	Number of MSM and TG at higher risk > 6,000, economic areas, tourist areas and high number of colleges and universities, high number of entertainment venues	Number of MSM and TG at higher risk: 3,000 - 5,000; economic areas, high number of colleges and universities, high number of entertainment venues	Number of MSM and TG at higher risk: 2,000 - 3,000; no NGOs/CSOs in place
MSW and TGSW	Location has many tourists, seasonal high number of MSWs and TGSWs		
FSW	Different types of FSWs (non-explicit venue based, explicit- non venue based, non-explicit non venue based) , many tourists, particularly foreigner tourists, seasonal high number of FSWs	High number of FSW (1,000-3,000), centers or new centers of development in the regions or peri-urban provinces	High number of non-Thai FSW, and border provinces
PWID	Provinces with 1000 and above PWID	In provinces with 300-999 PWID	Evidence of transition to injecting; new evidence
Prisoner		High number of prisoners (more than 7000) who are not located in high burden provinces (Phitsanulok and Ratchaburi); Disease burden provinces ranking 1-30	
Youth in detention centers		High number of youth (more than 1000) in detention centres; and in the provinces ranked 1-30 in terms of disease burden	
Migrants at high risk		High number of migrants at high risk, i.e. working on fisheries, seafood processing, factory and construction workers	

In order to achieve efficiency gains and success, interventions are divided into four separate packages. A most intensive package (11 provinces), an intensive package (25 provinces), a service package for specific contexts (14 provinces) and a basic package (for all other 27 provinces) have been defined. Annex 1 provides details for activities by population group and service packages planned.

Eleven provinces will receive the 'most intensive' or 'intensive' package of interventions. From a management perspective, these provinces will require top priority. These provinces include those where: 1) Bangkok, 2) HIV prevalence is higher than the national average, 3) there is a large number of target population members (including tourist cities and/or those with universities); and 4) where populations tend to be more mobile. A total of 25 provinces will receive the intensive package for at least one KP or more. Further, 14 provinces, where specific issues relevant to HIV control are in place will receive a package that is comprehensive and tailored. Border provinces and those provinces with documented and emerging risk networks (but low disease burden) will be included. All other provinces (27) in the country will receive basic service package providing information and commodities aimed at the prevention of risk behaviours, and normalization of HIV, and HCT. (See details in Annex 3)

Operational objectives by RRTTR components and strategic interventions

In order to reach the goal of Ending AIDS in Thailand by 2030, five operational objectives are proposed in this Plan. Each of these objectives has related strategic interventions which will need to be implemented at adequate intensity in specific KPs in specific geographical areas.

Operational Objective 1 : By 2017, reach 90% of all KPs with evidence based prevention services

Key strategic interventions : delivery of high coverage prevention services to KPs including information provision including using social media, BCC, condom provision and promotion, needle syringe programmes, and methadone maintenance.

Operational Objective 2 : By 2019, recruit 90% of all reached KPs into HIV testing

Key strategic interventions : Demand creation for HIV testing, branding of service sites to increase user recognition and confidence, STI diagnosis and management, normalization of HIV testing, and community awareness generation.

Operational Objective 3 : By 2019, achieve a coverage of 90% for testing among all recruited KPs

Key strategic interventions : Implementation of decentralized same day testing; Provision of mobile and community-based testing; HCT integration into primary care services

Operational Objective 4 : By 2019, provide treatment for all HIV infected KPs

Key strategic interventions : ART treatment initiation at any CD4 level; decentralization of ART and follow-up services; effective of linkages to anti-natal care to eliminate vertical transmission

Operational Objective 5 : By 2019, retain 90% of infected KAPs in treatment services

Key strategic interventions : Adherence support and delivery of electronic and mobile based adherence support over life of treatment; case management at the community level

The Operational Plan (2015-2019) sets targets for a high proportion of KPs and their regular sex partners individually for each component of the RRTTR framework, shown in Table 5.

Table 5: Key Coverage Targets for Ending AIDS by each component of RRTTR framework

Targets: Thailand's Ending AIDS by 2019							
	Baseline 2012-13	2014	2015	2016	2017	2018	2019
HIV prevention coverage (REACH)							
Key populations (KP) (Higher risk MSM and TG, SW, PWID)	53%	61%	72%	79%	87%	90%	90%
HIV prevention coverage (RECRUIT)							
Key populations (KP) (Higher risk MSM and TG, SW, PWID)	NA	52%	60%	70%	78%	85%	87%
HIV testing Coverage (TEST)							
Key populations (KP) (Higher risk MSM and TG, SW, PWID)	41%	47%	54%	64%	72%	80%	84%
ART Coverage (TREAT)							
All PLHIV	54%	60%	65%	70%	75%	80%	85%
Care and ART Retention (RETAIN)							
24 month retention	78%	80%	85%	90%	90%	90%	90%
Viral load suppression at undetectable level (<50 cell/ml) at 12 months after ART initiation							
PLHIV who on ART	77.5%	78%	80%	82%	85%	87%	90%

Enabling Health and community systems

Community system strengthening : Key activities proposed are:(i) empower KPs and their networks to have a greater ownership and meaningful involvement in health promotion activities by building their capacity;(ii) build capacity of community health volunteers, outreach workers and peer volunteers in service delivery in cooperation with public health services which helps to breakdown the dichotomy between prevention and care services (specifically, to support HCT, treatment literacy, adherence and case management in community settings); (iii) develop effective referral linkages across community and publicly funded health facilities and; (iv) develop capacity for oversight, monitoring and evaluation– including training in the use of strategic information generated by M&E systems for evidence based planning, advocacy and policy formulation at the local level;

Service system strengthening. In line with the concept of decentralization of health care services for increased health care coverage of the KPs at the community level, service systems at the sub-district and community levels will be strengthened. A key element of this will be task shifting and sharing. Thailand has a very strong primary health care system and this system (and infrastructure) can be further utilized to bring high quality HIV services closer to people. Task shifting will entail the flow of services from provincial to district to sub-district hospitals, with the objective of increasing accessibility, availability, affordability, and satisfaction of the KPs.

A key aspect of service strengthening is improving coordination and referral services. All heath care services providers from government, non-government, and civil society

organizations at local level will be coordinated to discuss and implement joint plan for the community services improvement. A community health network will be formed, and will meet regularly for planning, implementing and monitoring of the community health service delivery system. It will include district hospitals, sub-district health promotion hospitals, community clinics, and local drug stores/pharmacies. Specifically, districts which have identified a large number of PLHIV will improve the capacity of local health promotion hospitals be developed as ART dispensing sites for those patients who are stable and have good adherence. This will reduce reliance on provincial hospitals and reduce travel time for patients. Over a 5 year period, 373 district health promotion hospitals will be developed to provide this function. Services of the health care network will be promoted in the same quality standards and branding across the country as part of Ending AIDS. Hospitals operating under the umbrella of BMA, MoPH, private hospitals pharmacies and community based HCT service sites will all be branded.

Capacity development for service quality improvement on counseling, laboratories, STI screening, and sensitivity to sexual diversity will be conducted at the sub-district governmental hospitals, community health clinics, comprehensive care centers and DiCs. Regular meetings with local pharmacies will be conducted for service referral and health information distribution to KPs. Capacity building for 344 PLHIV groups for case management, outreach services delivery, HCT, and adherence support will also be organized over a 5 year period. An online learning course will be set up and provided to support the work of the local health service network. Moreover, a technical assistance team will be set up at regional and provincial levels to provide technical support for the provision of quality HIV related health services and capacity building to the health staff at the sub-district health promotion hospitals. These technical teams will also do the regular supervision visits, and conduct assessments on assurance of quality of the HIV related services delivery and improvement among the health service networks or the Ending AIDS branding services.

Enabling Environment

This Operational Plan was developed with the recognition for the RRTTR framework to function; four key enablers need to be in place. These are:

1) Normalisation of HIV, and HIV testing
2) Reduction of stigma and discrimination
3) Rights protection and promotion of KPs
4) Revision of outdated and stigmatizing legislation.

Key activities proposed are:(i) develop a rights protection mechanism for KPs at the provincial level; (ii) review legal barriers related to the roll out of comprehensive harm reduction policies and sensitize law enforcement agencies; (iii) promote migrant health insurance by increasing awareness and demand creation, while identifying systemic issues that act as barriers and advocating for their removal.

In terms of normalisation of HIV and HCT, key activities are: (i) effective and sensitive public

communication and demand generation activities that improve knowledge of HIV (as a chronic disease which can be well managed and allow a good quality life), and uptake of regular HIV testing (including as part of annual health check-ups); (ii) promote positive attitudes towards PLHIV and KPs via audio-visual messaging, by removing fear based messaging and promoting HIV as a chronic health condition (similar to diabetes and hypertension), that can allow PLHIV to live fulfilling and useful lives;(iii) promote testing of HIV across the health system such as MCH, TB, haemodialysis, dental care, harm reduction services etc.

2. Costing and Budget Plan

Introduction

The budget presented in this section is a summary of the financial needs for Ending AIDS in Thailand for the period 2015-2019. This budget plan is derived from the detailed costing spreadsheet which lay out the costs of each activity over time by KPs, and contains the key assumptions – notably the unit costs – and the quantity of each activity. This chapter should be read in conjunction with spreadsheets (see Annex 4).

Costing Process and methods

The costs described in this section are based on the experience of the NAMc and their implementing partners who have strong experience of delivering prevention, treatment and care services in Thailand for over two decades. Standard unit costs were calculated per intervention and used across KPs. However, detailed costing of activities and outreach costs per population were also calculated in consultation with service providers. Package costs for creating an enabling environment, adequate management and strategic information generation and demand generation were also calculated in consultation with KPs and community based service delivery organizations.

A key consideration while costing was to ensure adequate outreach and community based service delivery, as part of ongoing efforts to decentralize services and make them more user-friendly. Additionally, the specific costs of 'connecting' with KPs via social and traditional audio-visual media to support demand generation and their recruitment into HIV testing were also calculated in consultation with the community.

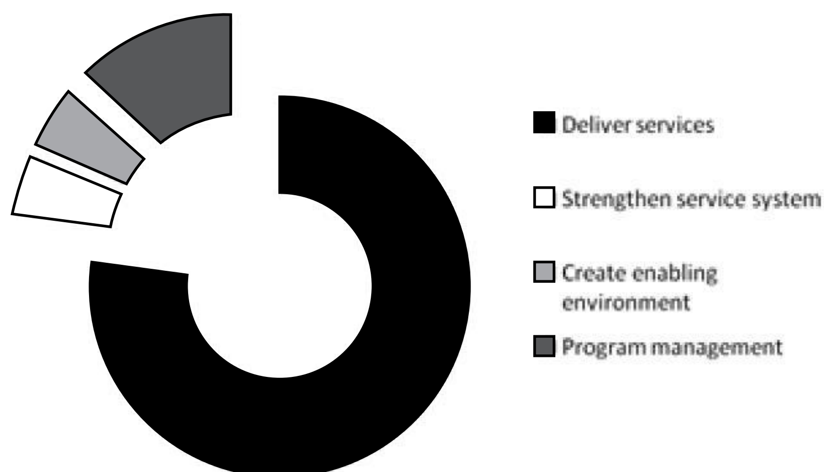
Detailed cost assumptions for commodities, capacity building and project management costs, field supervision, infra-structure improvement, mapping and strategic information generation for micro and local level planning are included in the Annex 4.

All costs were calculated in Thai Baht in acknowledgement of the fact that the HIV response is largely domestically funded.

The budget needs for 2015-2019

The total estimated cost of the National Operational Plan from 2015-2019 is 5,845,037,057 THB. This excludes the cost of anti-retroviral drugs that are currently already funded by the National Health Security Office and other health insurance agencies. It also excludes infrastructure costs and human resource costs for routine service delivery within the public health care system. Thailand's Operational Plan for Accelerating Ending AIDS has been costed in collaboration with the community and health service providers. The costs have been set out in four key action areas: (i) providing services; (ii) strengthening the service system; (iii) enabling the environment; and (iv) programme management. A total programme cost of THB 5,845,037,057 has been calculated, of which 77% is allocated to service delivery; 5% to system strengthening; 5% to enabling environment activities, and 13% to programme management including strategic information and M&E (Fig 5).

Figure 5: Distribution of costs by component



Costs by Priority Populations and Service Package

The Operational Plan is firmly focused on KPs and this is reflected by the fact that 77% of the entire planned cost is allocated to service delivery in KPs. Within the service delivery category which includes commodities, apart from FSWs accounting for 39% of the entire allocation in recognition of the large population size, MSM-TG are allocated the highest share of the resources as 28% of the total cost in recognition of the burden of new HIV infections in this population. PWID groups receive 10% of the entire allocation; prisoners (11%); youth in detention centers (1%); and high risk migrants (4%). See Table 6. Table 7 sets out detailed costs by package type and by year. For Package 1 (provinces that will deliver the most intensive services), a total cost of THB 1,964,180,699 is planned over the 5 period.

Table 6. Cost for services provided to key populations, with and without commodities, 2015-2019

Key populations	Cost with commodities		Cost without commodities	
	THB	%	THB	%
MSM-TG	1,249,781,387	27.8	425,535,080	30.0
MSW-TGSW	277,241,970	6.2	118,330,030	8.4
FSW	1,750,623,056	39.0	419,143,826	29.6
PWID	446,715,009	9.9	269,986,197	19.1
Prisoner	486,060,693	10.8	48,747,094	3.4
Youth in detention centers	33,284,394	0.7	13,597,000	1.0
Migrants at high risk	178,266,492	4.0	120,900,000	8.5
Partners of PLHIV	68,830,369	1.5	-	-
Total	**4,490,803,370**	**100.0**	**1,416,239,227**	**100.0**

Table 7: Costs for implementing the Operational Plan by population, per year and by package type including commodity costs (THB)

	MSM-TG	MSW-TGSW	FSW	PWID	Prisoner	Youth	Migrants	Couple of PLHIV	Total
FY 2015	212,528,634	47,607,493	297,967,304	75,574,864	71,814,144	5,793,138	33,365,455	8,275,902	752,926,934
Package 1	76,394,368	45,451,988	168,505,998	40,389,737				3,610,203	334,352,294
Package 2	52,317,436		65,222,084	16,943,473	52,425,195	4,074,893	29,169,467	4,665,699	224,818,247
Package 3	52,317,436		42,796,872	10,541,255					105,655,563
Package 4	37,127,536	2,155,505	21,442,350	7,700,399	19,388,940	1,718,245	4,195,988		93,728,963
FY 2016	231,412,717	54,966,714	330,569,533	86,046,028	86,424,116	6,064,803	34,936,368	10,873,584	841,293,863
Package 1	84,871,794	52,472,559	188,452,367	43,751,403				2,063,947	371,612,070
Package 2	56,703,272		71,440,171	21,904,893	62,587,857	5,127,054	31,618,253	8,809,637	258,191,137
Package 3	49.412,435		46,313,170	11,305,918					107,031,523
Package 4	40,425,217	2,494,155	24,363,825	9,083,814	23,836,259	937,750	3,318,115		104,459,135
FY 2017	255,729,223	56,501,594	363,104,961	90,515,537	98,733,087	6,736,773	35,795,318	13,612,632	920,729,125
Package 1	94,471,479	53,860,344	207,712,217	47,269,899				2,209,570	405,523,509
Package 2	62,463,608		78,588,157	22,000,605	71,409,518	5,733,366	32,212,289	11,403,062	283,810,605
Package 3	53,616,035		49,696,887	11,437,506					114,750,428
Package 4	45,178,100	2,641,250	27,107,700	9,807,527	27,323,570	1,003,406	3,583,030		116,644,583
FY 2018	270,097,097	58,062,529	378,409,081	96,439,554	111,042,173	7,008,618	36,654,931	16,510,874	974,224,857
Package 1	99,123,125	55,273,429	218,689,607	50,222,053				2,354,954	425,663,168
Package 2	65,543,004		80,091,727	22,674,517	80,231,293	5,939,617	32,806,625	14,155,920	301,442,703
Package 3	55.926,336		51,841.127	11,992,732					119,760,195
Package 4	49,504,632	2,789,100	27,786,620	11,550,252	30,810,880	1,069,001	3,848,306		127,358,791
FY 2019	280,013,715	60,103,639	380,572,176	98,139,026	118,047,173	7,681,062	37,514,419	19,557,377	1,001,628,587
Package 1	101,353,387	56,401.314	213,939,392	52,834,924				2,500,639	427,029,656
Package 2	67,032,470		81,516,442	21,973,517	84,741,793	6,546,167	33,400,898	17,056,738	312,268,025
Package 3	57,000,500		52,508,522	11,480,632					120,989,654
Package 4	54,627,357	3,702,325	32,607,820	11,849,952	33,305,380	1,134,895	4,113,521		141,341,250
Total THB	1,249,781,386	277,241,969	1,750,623,056	446,715,009	486,060,693	33,284,394	178,266,492	68,830,369	4,490,803,368

Costs for enabling Health and Community Systems

A shift to community based services will respond to capacity constraints in the health system Crowded publicly funded health facilities and overstretched human resources have necessitated a task sharing and shifting approach. Clearly, alternative systems leveraging community level strengths and ability to access risk groups will help to address these gaps. However, investment for building this capacity needs to make intensively, if quality standards are to be maintained. With this perspective, this Operational Plan has allocated a budget for decentralization of services to sub-district level, capacity building of community based service providers, and in branding of services (so that they are recognizable to KPs as user-friendly and high quality service points). A total of THB 290,046,820 has been allocated for strengthening health and community systems and promoting their usage (Table 8).

Table 8: Costs for enabling health and community system strengthening

Key Program Component	FY 2015	FY2016	FY2017	FY2018	FY2019
Strengthening health and community service systems					
1. Branding services	6,458,400	15,351,400	24,980,400	20,079,940	24,355,400
2. Decentralize services to sub-district promotion hospitals	2,263,500	9,897,700	16,624,680	15,320,280	16,655,360
3. Community system strengthening	32,418,600	19,591,100	32,290,600	19,736,100	34,023,360
Total THB	**41,140,500**	**44,840,200**	**73,895,680**	**55,136,320**	**75,034,120**

Costs for enabling the environment

Programme experience and international evidence has demonstrated on a number of occasions that investment in 'enabling environment' activities is fundamental for ensuring demand generation, uptake of services and retention in care. In acknowledgement of this, this Operational Plan has costed specific activities for enabling the environment. A total cost of THB 293,225,550 over a five year period is planned. The vast majority of these funds will be directed at effective public communication (72%), which will help to generate positive attitudes towards PLHIV and KPs, particularly among health service providers, law enforcement officials and those who provide education. Table 9 lays out the cost for enabling environment activities by year.

Table 9: Costs for implementing the enabling environment component

Create enabling environment	FY 2015	FY2016	FY2017	FY 2018	FY2019
1. Public communication	960,000	50,600,000	51,517,000	56,421,000	51,717,000
2. Create positive attitudes towards PLHIV and KPs among health service providers, education providers and law enforcement people	5,928,700	6,565,300	5,554,700	5,211,800	6,128,600
3. Promote the use of national code of conduct for HIV management in workplaces	3,311,600	4,571,000	1,897,600	5,757,000	5,583,600
4. Empower PLHIV and KPs on AIDS rights protection	1,113,800	2,304,400	2,708,100	3,287,400	3,691,100
5. Develop AIDS Rights protection mechanism at national &provincial levels	2,211,150	2,499,050	2,989,050	4,009,450	4,499,450
6. Revise laws and policies hampering access to services (only for harm reduction programme)	963,200	94,500	-	-	-
7. Surveillance on laws and policies which might have negative impact to HIV program implementation and promote the media who promote AIDS rights	226,000	226,000	226,000	226,000	226,000
Total THB	14,714,450	66,860,250	64,892,450	74,912,650	71,845,750

Costs for programme management, strategic information & M&E

A total budget allocation of THB 786,924,604 between 2015-2019 for three key categories as part of a well- managed and evidence based response is planned. These categories are: (i) programme management, (ii) strategic information, and (iii) monitoring and evaluation. As part of this, additional investment in data collection, analysis and improved data use to guide programme planning and evaluation is foreseen.

Table 10: Budget allocation for Programme Management, SI and M&E by year

Key Programme Component		FY 2015	FY2016	FY2017	FY2018	FY2019
Programme management, Strategic Information and M&E						
1	Planning and programme management (5% of cost for services delivery)	37,646,347	42,064,693	46,036,456	48,711,243	50,081,429
2	Strategic information and M&E	122,154,640	119,322,097	102,558,445	99,329,275	101,009,190
2.1	People, partnerships and planning	14,668,980	13,578,189	13,333,089	13,333,089	13,333,089
2.2	Collecting, verifying, and analyzing data	78,409,280	73,790,848	65,831,958	64,255,788	65,282,703
2.3	Programme evaluation and other strategic information	16,510,000	18,179,680	7,100,000	4,050,000	6,100,000
2.4	Data use for planning and programme improvement	12,566,380	13,773,380	16,293,399	17,690,399	16,293,399
	Total THB	159,800,987	161,386,790	148,594,902	148,040,518	151,090,620

Summary Budget

Table 11 sets out a summary budget by implementation component by year. In 2015, the investment required will total THB 968,582,871 and increase gradually to 1,299,599,077. The proportion of service delivery costs remains stable over time, while the programme management costs as a proportion of the total costs decline slightly.

Table 11: Summary budget (THB)

Key Components	Yr 2015	Yr 2016	Yr 2017	Yr 2018	Yr 2019
A. Deliver services	752,926,935	841,293,864	920,729,126	974,224,859	1,001,628,587
B. Strengthen service system	41,140,500	44,840,200	73,895,680	55,136,320	75,034,120
C. Create enabling environment	14,714,450	66,860,250	64,892,450	74,912,650	71,845,750
D. Programme management	159,800,987	161,386,790	148,594,902	148,040,518	151,090,620
Total	968,582,871	1,114,381,104	1,208,112,157	1,252,314,347	1,299,599,077

3. Action Plan for Ending AIDS in Thailand

Key Actions

In order to roll-out the Operational Plan for Ending AIDS, a wide range of communication, advocacy, budgeting, coordination and monitoring activities need to be carried out at the national and provincial levels. Given the decentralized nature of Thailand's health services (and their financing), broad indicative activities have been proposed here. These activities are planned for 2015-2016 by quarter. At the third quarter of 2016, all existing activities will be reviewed, and new activities will be proposed as needed. A Joint Ending AIDS Committee to provide oversight monitor the progress of this Operational Plan will be set up nationally and at the sub-national level.

Activities Plan at National and Sub-national Levels (2015-2016)

Planned activities have been organised along four key areas: (i) management oversight, strengthened strategic information and M&E; (ii) enabled health and community systems; (iii) quality service delivery along the RRTTR continuum; and (iv) enabled environment. Detailed activities under each category are listed below in Table 12.

Table 12: List of key actions, by quarter 2015-2016 Implemented at national level

Key actions		FY 2015 Q1	FY 2015 Q2	FY 2015 Q3	FY 2015 Q4	FY 2016 Q1	FY 2016 Q2	FY 2016 Q3	FY 2016 Q4
I	**Management**								
1	**Establish working system among stakeholders for targets, coordinating planned activities, technical support, monitoring and financial management in 2015 and revisit annually**								
1.1	National level	/				/			
1.2	Implementation level (Bangkok and other provinces)		/			/			
2	**Strengthen the strategic information and M&E system**								
2.1	Establish SI and M&E units at national, regional and provincial level to monitor the Ending AIDS and RRTTR approach	/	/						
2.2	Enhance RIHIS, NAP, NAP+ NAP-DAR, and its function including ability to disaggregate by key populations for HCT, ART, retention, Viral load, and inter-operability with other systems (TB and RTMIS)								
2.2.1	Develop National Single Unique Identifier Code (UIC) across KAPs	/	/						
2.2.2	Develop real time management information system (RTMIS) and its linkage with NAP systems	/	/	/	/				
2.2.3	Strengthen linkage of TB/HIV systems		/	/	/				
2.2.4	Build capacity of M&E staff by training, mentorship on new business model - RRTTR		/	/	/	/	/	/	/
2.2.5	Develop and roll out Crisis Response System			/	/	/			
2.3	Strengthen surveillance and surveys								
2.3.1	Undertaken IBBS for MSM, TG, MSW and PWID				/	/	/	/	/
2.3.2	Scale up IBBS for non-venue based FSW and MSW		/	/	/				
2.3.3	Roll out stigma and discrimination surveys among health facility staff, and PLHIV in health care setting at provincial level	/	/	/	/				

	Key actions	FY 2015				FY 2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.3.4	Undertake key population mapping and size estimation at provincial level	/	/	/	/				
2.4	Sustainable country own national evaluation and research								
2.4.1	Set up national evaluation agenda and renew national evaluation mechanism		/	/	/	/	/	/	/
2.4.2	Manage and undertake at least 2 programme evaluation studies			/	/	/	/	/	/
2.4.3	Start implementation research to support Ending AIDS approach				/	/	/	/	/
2.4.4	Develop appropriate HIV incidence measurement				/	/	/	/	/
2.4.5	Undertake cohort study among HIV positive pregnant women and validation of elimination PMTCT				/	/	/	/	/
2.5	Data dissemination and data use								
2.5.1	Enhance functions and improve utilization of AIDS Zero Portal	/	/	/	/	/	/	/	/
2.5.2	Disseminate key strategic information				/	/	/	/	/
2.5.3	Advocate and train for active data use through dissemination, workshops, meetings to national programme managers, member of National Committees to track progress of Ending AIDS operations, and facilitate the use of evidence to guide strategic and operational directions	/	/		/				
2.5.4	Undertake active data use process through active dissemination, workshops, meetings to program implementers, provincial AIDS committees, PCMs to facilitate the use data for adjust provincial targets, tracking progress of ending AIDS operation, timely correction of program performance and use for provincial program planning			/			/		/
II	Enabling health and community systems								
1	Branding key services								
1.1	Develop common goal, conceptualize and SOP for branding services and conduct orientation to key stakeholders	/							
1.2	Conduct assessment as inputs to develop strengthen quality of service interventions	/	/				/		
1.3	Refine HIV counselling and testing curriculum including support mechanism and training		/	/				/	/

	Key actions	FY 2015				FY 2016			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.4	Refresh SOP for laboratories and training		/	/				/	/
1.5	Develop enhanced STI screening, diagnosis and treatment procedures and roll out training		/	/				/	/
1.6	Scale up gender sensitivity curriculum as a part of heath care provider training			/	/				/
1.7	Develop pharmacy networks to support HIV prevention and care	/	/			/			
1.8	Develop on-line learning portal for health care providers	/	/	/	/	/	/	/	/
2	Decentralize services to sub-district promotion hospitals								
2.1	Develop curriculum for health care providers at sub-district hospitals		/	/					/
2.2	Establish regional partnership and supporting committee including government, civil society, academia to oversight and guide direction of services		/	/			/		
2.3	Establish provincial partnership and supporting committee including government, civil society, academia for programme oversight		/	/			/		
2.4	Training health care providers from sub-district hospitals including supervision and mentorship			/	/	/	/	/	/
2.5	Conduct quality assessment and assurance among sub-district hospitals				/				/
3	Community system strengthening								
3.1	Develop curriculum and training for CSO to implement RRTTR	/	/		/		/		/
3.2	Training on HCT			/	/		/		/
3.3	Training on ART adherence and reproductive health services for PLHIV			/	/		/		/
3.4	Training on ART case management			/	/		/		/
III	Services Delivery: RRTTR								
	Reach								
1	Community mapping and micro planning								
1.1	Undertake mapping and use data for developing micro- level planning	/	/			/			

		FY 2015				FY 2016			
	Key actions	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.2	Conduct rapid assessment to identify needs and strategy to effective reach sub-group of KPs	/	/			/			
2	Reach targets by in-person approach								
2.1	Undertake outreach/peer-lead outreach activities		/	/	/	/	/	/	/
2.2	Undertake Peer Driven Intervention (PDI) in the most intensive package provinces		/	/	/	/	/	/	/
2.3	Implement demand generation through community mobilization including night- tours, community events		/	/	/	/	/	/	/
2.4	Undertake advocacy activities to obtain full participation from entertainment establishment's owners and workplaces to support prevention activities.			/		/		/	
3	Reach targets by other means								
3.1	Develop and implement communication through social media such as websites, Facebook, lines, geo-social applications and other mobile applications including real time interactive system between KAP and outreach/ peer workers and health care providers to enhance the recruitment to HCT and STI service.		/	/	/	/	/	/	/
	Recruit								
1	Recruit for HIV testing and STI screening into registration system by personal direct contact and/or referrals from outreach services								
1.1	Develop client flow and strengthen referral system among different clinics within the same hospital or across hospitals (including partner of KPs)		/	/	/	/	/	/	/
1.2	Develop member system for recruiting and/or referred for HIV testing and STI screening		/	/	/	/	/	/	/
1.3	Develop education activities including counselling for KAP and partners at DiC to motivate for HIV testing and STI screening		/	/	/	/	/	/	/
1.4	Develop and implement incentives for service provided or referral at drugstore and private clinics		/	/	/	/	/	/	/
2	Recruit for HIV testing and STI screening into registration system by online, phone calls, and social media								
2.1	Disseminate information on branded/qualified HCT clinics through various channels (online, phone call and social media)		/	/	/	/	/	/	/

		FY 2015				FY 2016			
	Key actions	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Test								
1	Scale up Health facility based HCT service with same day test result								
1.1	Set up HCT clinics and train health care providers at sub district hospitals for same day HCT services			/	/	/	/	/	/
1.2	Establish extended HCT clinics near entertainment areas or hotspots where KPs congregate		/	/	/	/	/	/	/
2	Mobile HCT service (health facilities and NGOs partnership)								
2.1	Set up and operate mobile HCT clinics near entertainment areas, hotspots where KPs congregate and workplace		/	/	/	/	/	/	/
3	Community based HCT								
3.1	Establish and scale up community led HCT at DiC (pre-test and post-test counseling and finger pricked testing offered by NGO)					/	/	/	/
	Treat								
1	Early ART initiation								
1.1	Develop standard client flow and strengthen referral system among different clinics within the same hospital or across hospitals (including partner of KAPs) for ART services	/	/						
1.2	Develop psychosocial and economic support for PLHIV who needs assistance for ART initiation through community based and peer intervention and support			/	/	/	/	/	/
1.3	Develop SOP and expand infrastructure and improve capacity to provide point of care including CD4 count			/	/	/	/	/	/
	Retain								
1	Retain key populations living with HIV for treatment and other essential services								
1.1	Conduct referral system analysis to identify gaps and intervention the system within hospital and among regional, provincial, district and selected sub-district hospitals	/	/						

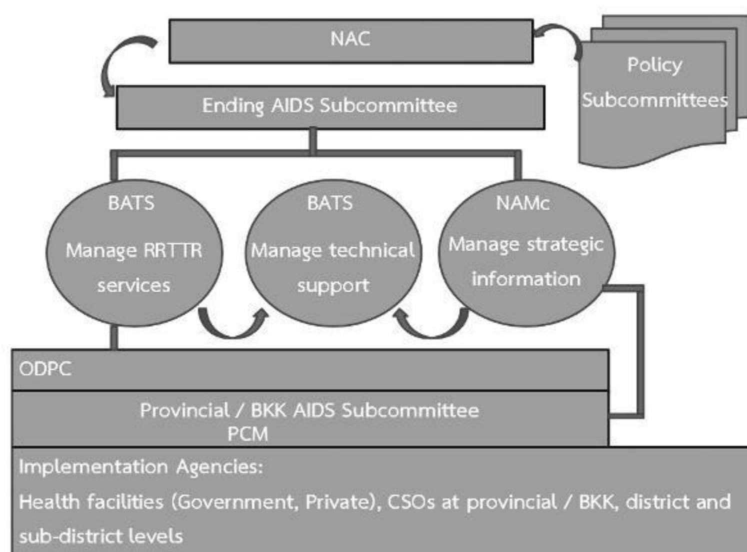
		FY 2015				FY 2016			
	Key actions	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.2	Develop KP-PLHIV case management for CBO including training and mentorship			/	/	/	/	/	/
1.3	Implement treatment literacy, ART adherence support by PLHIV group and through Continuum Care Centre (CCC) including strengthening their capacity with Ending AIDS approach		/	/	/	/	/	/	/
2	Retain key populations who tested negative for prevention services								
2.1	Develop and implement reminding system for KAP for repeat HIV testing, STI check up			/	/	/	/	/	/
2.2	Develop and implement effective incentive strategies to retain/ reinforce KAP to practice safer sex and retain in key services			/	/	/	/	/	/
IV	**Enabling environment**								
1	Mass Media								
1.1	Establish mechanism for public communication/mass media and develop national agreed message/content	/	/						
1.2	Develop content, communication strategy and launching			/	/	/	/	/	/
1.3	Develop public-private partnership				/	/	/	/	/
2	Normalize of HIV and HIV testing								
2.1	Undertake stigma and discrimination survey in health care setting and PLHIV and use data for developing stigma and discrimination reduction intervention	/	/	/	/				
2.2	Develop and implement stigma discrimination reduction in education sector				/	/	/	/	/
2.3	Scale up law enforcement training			/			/	/	
3	Promote Code of Conduct AIDS at workplace								
3.1	Implement AIDS Standard Operation at private sector			/	/	/	/	/	/
3.2	Implement AIDS Standard Operation at public sector			/	/	/	/	/	/
4	Rights protection and promotion of KAPs								
4.1	Train PLHIV and KAP trainers on AIDS and human rights			/	/	/	/	/	/
4.2	Conduct training on human rights to PLHIV and KPs			/	/	/	/	/	/
5	Strengthen right protection mechanism								
5.1	Support function of national human right protection committee	/	/	/	/	/	/	/	/
5.2	Develop and scale up provincial human right protection committee	/	/	/	/	/	/	/	/
6	Revision of outdated and stigmatizing legislation								
6.1	Harm reduction			/	/	/	/	/	/
6.2	Health insurance for Migrants			/	/	/	/	/	/
6.3	HIV testing among youth aged <18			/	/	/	/	/	/
6.4	Surveillance on legislations and policies which might affect rights to work; surveillance as well as promoting mass media to promote AIDS rights			/	/	/	/	/	/

Programme Management

At the national level stewardship of the overall Operational Plan falls under the auspices of the National AIDS Committee (NAC), this is currently chaired by the Deputy Prime Minister of Thailand. This Committee is advised on policy issues by 6 sub-committees including prevention, treatment, AIDS Rights, bio-medical prevention, promoting provincial and local stakeholder ownership, and Strategic Information. However, the Ending AIDS Strategy needs linkage of prevention and treatment as well as enabling environment and strategic information, the NAC will mandate a new 'Ending AIDS Subcommittee' in Thailand which will be responsible for monitoring the progress of the Operational Plan in Thailand. This will be a multi-stakeholder committee which will meet on a quarterly basis and will consist of BATS, NAMc, NHSO, PLHIV representatives, CSO representatives, and other relevant stakeholders. Figure 6 sets out the planned management arrangements for oversight of the Operational Plan

The BATS will serve as overall manager for implementation and coordination across the RRTTR cascade, together with NAMc, assuring that financial and human resources are available at the national and provincial levels to operationalize the plan and to assure technical quality is maintained. The NAMc will be responsible for Strategic Information and coordination across the Bureau of Epidemiology and BATs to track the epidemic and implementation response.

Figure 6: Management Structure, National Operational Plan



In recognition of the importance of technical support as the crucial measures for the successful implementation, in close collaboration with other stakeholders BATS will be responsible for establishing the technical committee, including experts from government, civil society, academia and development partners. This committee will provide not only

the implementation guidelines/tools but also building capacity of sub-national technical support group, coordinated by the Regional Office of Disease Prevention and Control, to closely provide technical support to each priority province.

At the implementation level, the Provincial Health Office and BMA will lead the coordination for operationalizing the provincial Ending AIDS Plan, through the Provincial/Bangkok AIDS Committees on the policy issues and through the Provincial Coordinating Mechanism (PCM) for implementation. The PCMs will be staffed by dedicated personnel representing multiple sectors. These personnel will coordinate day-to-day management and financial issues as well as the technical support to service providers and the assurance of quality of service provision. Moreover, they will compile data from all partners and will assure reporting into the AIDS Zero Portal. PCMs will link to the BATS at the national level through ODPCs and report on operational and technical progress as well as needs. Over the five year period, NAMc will provide assistance to PCMs in order to build their capacity to manage their financial and technical needs.

4. Monitoring of the Operational Plan

The Cabinet and National AIDS Committee (NAC) approved the National AIDS Strategy (NAS) for 2014-2016 including National M&E Framework. In addition, the NAC endorsed the National Strategic Information and M&E System Strengthening Plan: 2012-2016 as a roadmap for developing a unified comprehensive and coordinated M&E system. This section will address (1) Thailand's ending AIDS M&E framework and core indicators and (2) Priority strategic information and M&E (SIM&E) system strengthening activities that aims to reinforce the existing SIM&E plans, while updating and incorporating additional M&E framework and priority SIM&E system strengthening activities that is essential to monitor progress of Thailand's ending AIDS implementation in 2015-2019.

Thailand's Ending AIDS M&E Framework

The M&E framework for Ending AIDS is designed at two levels; at the goal/impact level and at an operational level. At the goal level, the focus is on results of 'prevention effect' of early ART complemented by the effect of sustained behavioral change communication and other prevention efforts. While the operational level aims at monitoring and tracking key results of each key operational approach based on the Reach-Recruit-Test-Treat-Retain in continuum manner that allows identification of gaps between services in the prevention and treatment cascade. Annex 2 presents the M&E framework that contains core indicators, targets and justification, data sources, responsible organizations and frequency of data collection for each core indicator.

Goal level indicators measure the impact of the National Ending AIDS Strategy on reduction in the number of new HIV infections, AIDS related deaths and vertical transmission. The AIDS Epidemic Model (AEM) is key data source to provide national estimates of new HIV infections and AIDS related deaths (in recognition of the fact that HIV prevalence among key populations (KPs) is a less sensitive measure for the impact of prevention in the context of universal ART provision). Moreover, Thailand will conduct a special study to measure HIV incidence as part of routine surveillance systems in selected sites with a high HIV burden, good M&E capacity and the willingness to sustain system the incidence measurement system in the long term. Thailand has a well-developed monitoring system for PMTCT; to advance this effort further, the cohort monitoring system among Thais and non-Thais pregnant women who are infected with HIV will be introduced (as a part of the Global Validation an Elimination of MTCT Initiative). Operational level indicators measure desired outcomes and key outputs as 'results' of key operational objectives in the RRTTR cascade. The proposed operational indicators are aligned with those articulated in the current National M&E Plan, but some adjustments have been made. Notable adjustments for the National Ending AIDS Operational Plan are as followed:

The nationally agreed indicator definition on "Reach with prevention package" is now aligned with the defined "service package" on behavioral change communication which includes delivery by social media and traditional approaches. The definition of "recruit to service" has been delineated clearly from 'reached' to indicate actual registration into HCT or STI or MMT services (HCT services will be initiated by providers at STI and MMT

clinics). This 'recruitment' indicator serves as a key operational indicator that provides the critical input for the transition of KPs from access to information and commodities only to actual uptake of HCT services.

Introduction of a real time monitoring and management information system (RTMMIS) as new data source to track the RRTTR will support continuity between community and public health sector led services and will allow local level analysis of the cascade. The current existing national reporting system aggregates information at provincial and national level in a cross-sectional manner (from community based service delivery and health facility based on HCT, ART and retention). Starting from 2015, Thailand will develop and implement RTMIS using a unique identifier system that can link across the various aspects of the prevention, treatment and care components. This system will focus not just on improving monitoring, but serve as a performance improvement tool, that will raise flags and alerts in the system to support health care workers, and allow cohort monitoring and tracking performance of the RRTTR approach for all key populations. Please refer Annex 2 for the National M&E Plan.

Strengthening the strategic information and M&E system for Ending AIDS

Thailand adopt the twelve components as basic to develop the operational plan for the SIM&E system strengthening (see details in the national SIM&E plan: 2012-2016) guided by the MESS assessment conducted in 2011. This section aims to update priority SIM&E activities to better monitor to match with new service delivery systems that put in place as part of the ending AIDS strategy.

To advance goals of the existing national SIM&E plan, the objectives of updated priority SIM&E activities are to (1) develop innovative measurement methods to better monitor impact and outcome and track performance of the RRTTR and community based service delivery; (2) strengthen an integration with national HMIS system and with the TB; (3) undertake national evaluation agenda to guide ending AIDS operation; and lastly (4) strengthen data availability, sharing and use and analysis at sub-national level.

(1) Develop innovative measurement methods to better monitor impact and outcome and track performance of the RRTTR including community based service delivery

Key innovative tools will be developed and scaled up to support ending AIDS strategy are;

1) The real time monitoring and management information system (RTMMIS): It serves as tool to monitor and manage performance of community based services on reach, recruit and retain for all key populations. With implementation of a national agreed unique identifier code system (a national single UIC) will link facility based monitoring system with National AIDS Database (NAP) and complement with Routine Integrated HIV information system (RIHIS). The RTMMIS will enable Thailand to track cross-sectional as well as cohort monitoring of the RRTTR cascade. In addition, it will serve as tool to empower community organizations to use information timely for correction or improvement their performance over the course of operation.

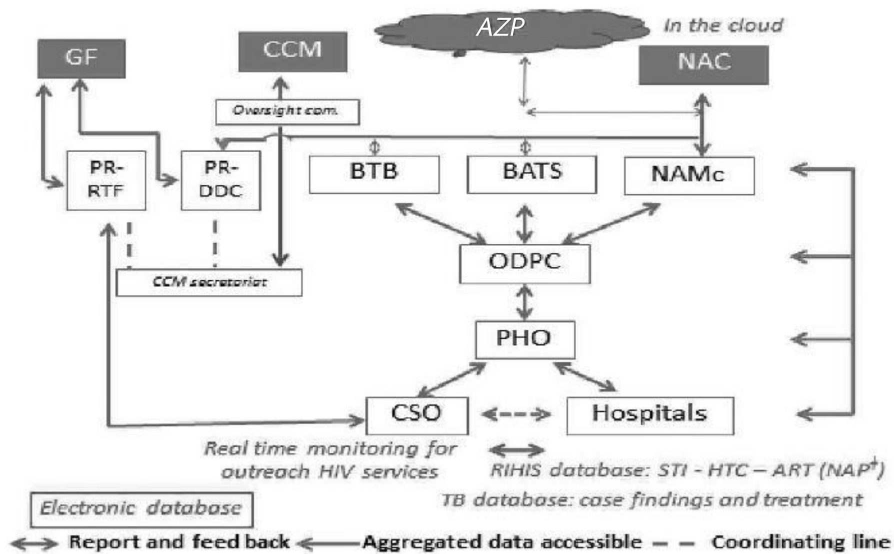
2) Enhanced Integrated Biological and Behavioral Surveys (IBBS): IBBS played important role and will continue with better quality and efficiency for understanding and monitoring the situation and access to services for key populations. The IBBS among non-venue based FSW and MSW will be scaled up in sentinel sites as part of a routine system. HIV incidence measurement among KPs will be examined and implemented in selected sites or selected key affected populations as appropriate. While stigma discrimination questions will be integrated in the IBBS starting from 2015.

3) The cohort monitoring system for PMTCT program using new IT technology: system will be developed and rolled out to improve performance of PMTCT program including enhanced monitoring system for early infant diagnosis.

(2) An integrated national HMIS system and with the TB

In the context of the Health Reform Agenda in Thailand, local level information for action and decision making and reduction of fragmentation in the system are important directions that all disease specific M&E activities need to be cognizant of. The vision of an integrated M&E system which helps to better align across different programme areas and organizations and TB programmes is described below in Figure 7. The framework emphasizes on feedback on reports which will promote better ownership, use and quality of data collection. Notably, this framework also supports the alignment of HIV-TB, as well as community and health system based programmatic monitoring. This framework also specifies the critical coordination role of the Provincial Health Office, the Office of Disease Prevention and Control (Regional levels) and the central level coordinating body for the Global Fund.

Figure 7: Data Flow fw Ending AIDS monitoring



Remarks

AZP : AIDS Zero Portal
BATS : Bureau of AIDS
BTB : Bureau of Tuberculosis
CCM : Country Coordinating Mechanism
CSO : Civil society Organizations
GF : Global Fund to Fight AIDS, TB and Malaria
NAC : National AIDS Committee
NAMc : National AIDS Management Center
ODPC : Regional Office of Disease Prevention and Control
PHO : Provincial Health Office
PR-DDC : Principal Recipient – Department of Disease Control
PR-RTF : Principal Recipient – Raks Thai Foundation
RIHIS : Routine Integrated HIV Information System

(3) National evaluation agenda to guide ending AIDS implementation

Thailand foresees a great opportunity of transforming academic and embracing implementation science for developing country own evidence based decision making. Effort will be devoted into developing implementation researches that will be conducted as an integral part of the ending AIDS implementation in selected sites. Design will be taken into account of using existing program monitoring, IBBS, BSS, registration records, size estimation, and surveys to complement with new data collection that may requires. Implementation researches will be provided periodically feedbacks on progress of implementation and provided recommendations for improvement immediately. Overall program implementation will be well-documented. In addition, there are a number of high-priority topics resulted from country dialog, including effectiveness of RRTTR approach, community based HCT services, test and treat HIV/TB in prisons and integrated treat and treat strategies with PEP and PrEP services.

(4) Strengthen a functional strategic information and M&E system at subnational level to End AIDS

Provincial AIDS Committees and Provincial Coordinating Mechanisms (PCMs) serve as key bodies to translate the National Ending AIDS Operational Plan into action at provincial level. To ensure policy makers and program managers at provincial level use local evidence to guide decision on planning and implementation, “a minimum set of area based strategic information” will be introduced, made available, shared and used, in particular, in the top 30 priority provinces with highest HIV burden. This set of strategic information includes:

- HIV epidemic and key behaviours (including HIV estimation and projection)
- Key population size estimations
- Community based service monitoring system through RTMMIS and RIHIS
- Stigma and discrimination monitoring
- Provincial AIDS spending assessment

The AIDS Zero Portal (AZP) will be a platform to consolidate all information that Provincial AIDS Committee and provincial coordinating mechanism can use to monitor progress of provincial response towards the ending AIDS from provincial response. Building capacity to sub-national program managers will be provided to ensure a full use of AZP for policy change and programme improvement.

Oversight of the Operational Plan and accountability

The NAC will serve as oversight body to monitor the progress of the Ending AIDS Operational Plan, and ensure accountability of investment. The national subcommittee for promoting provincial and local stakeholder ownership will oversee the implementation at a provincial level. The national subcommittee for strategic information will work closely with other national subcommittees to ensure evidence existing and use to monitor the progress of the ending AIDS. Meetings will be convened regularly. Site visits will be made at least once a year among subcommittees, in particular, the early phase of operational plan. To pursue sustainability of the oversight process of the plan, key performance indicators for Ending AIDS should be introduced as a part of joint key performance indicators (KPI) used by the MoPH. These KPIs are a good tool for facilitating synergistic effort, and accountability among all government agencies and organizations across the various relevant ministries who are stakeholders in HIV response.

5. Annexes

Annex 1 : Service Packages by Key Populations

Annex 2 : National Operational Indicators and Targets for Thailand's Ending AIDS: 2015-2019

Annex 3 : Indicators Definition

Annex 4 : Prioritized Provinces for Key Population and Migrants at High Risk

Annex 5 : Details of Costing for Operation of National Ending AIDS Plan for the Year 2015-2019

Annex 6 : A Name List of Working Groups on National Operational Plan to Accelerate Ending AIDS in Thailand for the Year 2015-2019

Annex 1: Service Packages by Key Populations

Table 1.1: Service packages for men who have sex with men and transgender persons

MSM and TG Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
Criterion for type of service delivery	Number of MSM and TG at higher risk > 6,000, economic areas, tourist areas and high number of colleges and universities, high number of entertainment places	Number of MSM and TG at higher risk: 3,000 - 5,000; economic areas, high number of colleges and universities, high number of entertainment places	Number of MSM and TG at higher risk: 2,000 - 3,000; no NGO working in the area	
Reach				
Mapping and planning	• Micro-level planning based on annual mapping survey for BKK/provinces, and additional mapping during high season	• Micro-level planning based on annual survey for provinces and additional survey done for the prioritized sites in the provinces.	• Micro-level planning based on annual survey for provinces and additional survey done for the prioritized sites in the provinces.	• Not needed
Reach in person	• MSM and TG will be reached through their social network. • Using Peer Driven Interventions (PDI) to reach different types of MSM and TG through their social network. • Community activities will be organized to help identifying and keep peer educators / seeds for PDI working in the system. • Night tours in hotspots such as saunas, bars and clubs will be conducted to reach those at higher risks.	• MSM and TG will be reached through their social network. • Community activities will be organized to help identifying and keep peer educators working in the system • Night tours in hotspots such as saunas, bars and clubs will be conducted to reach those at higher risks.	• MSM and TG will be reached through their social network. • Community activities together with incentives will be organized to help identifying and keep workers working in the system.	• Reach through STI services.
Reach by social media	• MSM and TG will be reached through social media such as	• MSM and TG will be reached through social media such as	• MSM and TG will be reached through social media such as	• Not needed

MSM and TG Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
	websites, Facebook, Line, geo-social applications and other mobile applications. • The online reached together with off-line group activities will enhance the recruitment to HCT and STI services.	websites, Facebook, Line, geo-social applications and other mobile applications. • The online reached together with off-line group activities will enhance the recruitment to HCT and STI services.	websites, Facebook, -social applications and other mobile applications. • The online reached together with off-line group activities will enhance the recruitment to HCT and STI services.	
Commodities distribution	• Male and female condoms, lubricants	• Male and female condoms, lubricants	• Male and female condoms, lubricants	• Male and female condoms, lubricants
Recruit				
Recruit for HIV testing and STI screening; registered and or referred through direct contact for personal services	• Recruitment through outreach services by using member cards for getting HCT and STI screening services; • Existing DiCs will be improved to increase the use by MSM and TG for recruitment and/or referred for testing and STI screening; • Drug store/private clinics: Incentives for service provided or referrals; • Recruit through extended services nearby the entertainment areas during the time convenient for MSM and TG. • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive MSM and TG.	• Recruitment through outreach services by using member cards for getting HCT and STI screening services; • Drug store/private clinics: Incentives for service provided or referrals; • Recruit through extended services nearby the entertainment areas during the time convenient for MSM and TG. • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive MSM and TG.	• Recruitment through outreach services by using member cards for getting HCT and STI screening services; • Drug store/private clinics: Incentives for service provided or referrals; • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive MSM and TG.	• Improved STI clinics of hospitals and recruitment of HCT and STI services for their partners.
Recruit for HIV testing	• Registration and referred on	• Registration and referred on line	• Registration and referred on	• Not needed

MSM and TG Service Packages

	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
and STI screening registered and/or referred through social media and smart phones	line and by phone. • Encourage recruitment of their partners.	and by phone. • Encourage recruitment of their partners.	line and by phone. • Encourage recruitment of their partners.	
Test				
Health facility HCT	• HCT services will be provided at sub district hospitals. • Same day result tests will be promoted at all levels of health facilities.	• HCT services will be provided at sub district hospitals. • Same day result tests will be promoted at all levels of health facilities.	• HCT services will be provided at sub district hospitals. • Same day result tests will be promoted at all levels of health facilities.	• Same day result tests will be promoted at all levels of health facilities.
Mobile HCT	• Mobile HCT services will be arranged to the convenient time and place for MSM and TG by health facilities coordinated with outreach services by NGO.	• Mobile HCT will be arranged to the convenient time and place for MSM and TG by health facilities coordinated with outreach services by NGO.	• Mobile HCT will be arranged to the convenient time and place for MSM and TG by health facilities coordinated with outreach services by NGO.	• Not needed
Community based HCT	• Pre-test and post-test counseling and finger pricked testing will be provided by NGO at selected DiC.	• Not needed	• Not needed	• Not needed
Treat				
ART initiation	• Referral for treatment	• Referral for treatment	• Referral for treatment	• At hospitals
ART monitoring	• According to national guidelines	• According to national guidelines	• According to national guidelines	• According to national guidelines

MSM and TG Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
Retain				
Retain MSM and TG living with HIV for treatment services	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or NGO; • Case management by NGOs, outreach workers for psychological and adherence support, as well as reproductive health including positive prevention; • Intensive support will be provided by experienced NGOs for specific need based cases.	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or NGO; • Case management by NGOs, outreach workers for psychological and adherence support, as well as reproductive health including positive prevention;	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or CCC.	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or CCC.
Retain MSM and TG tested negative for regular services	• Keep reached people with the services by memberships and community activities. • Reminding those with negative HIV tests for regular HCT by HCT units at health facilities. • Real time monitoring will be applied to keep contact with registered individual.	• Keep reached people with the services by memberships and community activities. • Reminding those with negative HIV tests for regular HCT by HCT units at health facilities. • Real time monitoring will be applied to keep contact with registered individual.	• Keep reached people with the services by memberships and community activities. • Reminding those with negative HIV tests for regular HCT by HCT units at health facilities. • Real time monitoring will be applied to keep contact with registered individual.	• Reminding those with negative HIV tests for regular HCT by HCT units at health facilities.

Table 1.2: Service packages for male sex workers and transgender sex workers

MSW and TGSW Service Packages		
	Package 1 : Most intensive	Package 4: Basic package
Criterion for type of service delivery	Many tourists, seasonal high number of MSWs and TGSW	
Reach		
Mapping and planning	• Annual survey for BKK/provinces and additional survey done for the high season period of the prioritized sites in BKK/provinces. • Using the results of the survey for micro planning.	• Annual survey integrated with FSW annual survey. • Using the results of the survey for planning of the program.
Reach in person	• MSW and TGSW will be reached through their social network. • Target population per 1 catchment area; 2 outreach worker/catchment area; 3 peer workers/outreach workers; 50 peer educator/peer worker; 20 MSW and TGSW/peer worker. • Using Peer Driven Interventions (PDI) to reach different types of MSW and TGSW through their social network. • Community activities will be organized to help identifying and keep peer educators / seeds for PDI working in the system.	• Site visit and community activities by health staff. • Reach through STI services.
Reach by social media	• MSW and TGSW will be reached through social media such as Facebook, Camfrog and other mobile applications.	• Not needed
Commodities distribution	• Male and female condoms, lubricants	• Male and female condoms, lubricants
Recruit		
Recruit for HIV testing and STI screening; registered and or referred through direct contact for personal services	• Recruitment through outreach services by using member cards for getting HCT and STI screening services; • Existing DiCs will be improved to increase the use by MSW and TGSW for recruitment and/or referred for testing and STI screening; • Drug store/private clinics: Incentives for service provided or referrals; • Recruit through extended services nearby the entertainment areas during the time convenient for MSW and TGSW. • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive MSW and TGSW.	• Improved STI clinics of hospitals and recruitment of HCT and STI services for their partners.
Recruit for HIV testing and STI screening registered and/or referred through	• Registration and referred on line and by phone. • Encourage recruitment of their partners.	• Not needed

MSW and TGSW Service Packages		
	Package 1 : *Most intensive*	Package 4: Basic package
social media and smart phones		
Test		
Health facility HCT	• HCT services will be provided at sub district hospitals and extended clinics near entertainment areas. • Same day result tests will be promoted.	• Same day result tests will be promoted.
Mobile HCT	• Mobile HCT services will be arranged to the convenient time and place for FSW by health facilities coordinated with outreach services by NGO.	• Not needed
Community based HCT	• Pre-test and post-test counseling and finger pricked testing will be provided by NGO at selected DiC.	• Not needed
Treat		
ART initiation	• Referral for treatment; point of care CD4 count at district hospitals with >500 patients	• At hospitals
ART monitoring	• According to national guidelines	• According to national guidelines
Retain		
Retain MSW and TGSW living with HIV for treatment services	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or NGO; • Case management by NGOs, outreach workers for psychological and adherence support as well as reproductive health including positive prevention; • Intensive support will be provided by experienced NGOs for specific needed cases.	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or CCC.
Retain MSW and TGSW tested negative for regular services	• Keep reached people with the services by memberships and community activities. • Reminding those with negative HIV tests for regular HCT by HCT units at health facilities • Real time monitoring will be applied to keep contact with registered individual.	• Reminding those with negative HIV tests for regular HCT by HCT units at health facilities

Table 1.3: Service packages for female sex workers

FSW Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
Criterion for type of service delivery	Different types of FSWs (non-explicit venue based, explicit-non venue based, non-explicit non venue based) , many tourists, particularly foreigner tourists, seasonal high number of FSWs	High number of FSW (1,000-3,000), centers or new centers of development in the regions or peri-urban provinces	High number of non-Thai FSW and border provinces	
Reach				
Mapping and planning	• Micro-level planning based on annual mapping survey for BKK/provinces, and additional mapping during high season	• Annual survey. Using the results of the survey for planning of the program.	• Annual survey. Using the results of the survey for planning of the program.	• Annual survey. Using the results of the survey for planning of the program.
Reach in person	• FSW will be reached through their social network. • Using Peer Driven Interventions (PDI) to reach different types of FSW through their social network. • Community activities will be organized to help identify and keep peer educators / seeds for PDI working in the system.	• FSW will be reached through their social network. • Community activities will be organized to help identifying and keep peer educators working in the system	• FSW will be reached through their social network. • Community activities together with incentives will be organized to help identifying and keep workers working in the system. Medias will be developed in languages of non-Thai FSW.	• Site visit and community activities by health staff. • Reach through STI services.
Reach by social media	• Reached through social media such as Facebook, LINE, Camfrog and other mobile applications.	• Reached through social media such as Facebook, LINE, Camfrog and other mobile applications.	• Reached through social media such as Facebook, LINE, Camfrog and other mobile applications in languages of non- Thai FSW.	• Not needed
Commodities distribution	• Condoms, lubricants	• Condoms, lubricants	• Condoms, lubricants	• Condoms, lubricants

FSW Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
Recruit				
Recruit for HCT & STI screening; registered/or referred through direct contact	• Recruitment through outreach services by using member cards for getting HCT and STI screening services; • Existing DiCs will be improved to increase utilization by FSW for recruitment and/or referred for testing and STI screening; • Recruit through extended services nearby the entertainment areas during the time convenient for FSW. • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive FSW.	• Recruitment through outreach services by using member cards for getting HCT and STI screening services; • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive FSW.	• Recruitment through outreach services by using member cards for getting HCT and STI screening services; • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive FSW.	• Improved STI clinics of hospitals and recruitment of HCT and STI services for their partners.
Recruit for HCT &STI screening registered and/or referred through social media	• Registration and referred on line and by phone. • Encourage recruitment of their partners.	• Registration and referred on line and by phone. • Encourage recruitment of their partners.	• Registration and referred on line and by phone. • Encourage recruitment of their partners.	• Not needed
Test				
Health facility HCT	• HCT services will be provided at sub district hospitals and extended clinics near entertainment areas.	• HCT services will be provided at sub district hospitals and extended clinics near entertainment areas.	• HCT services will be provided at sub district hospitals and extended clinics near entertainment areas.	• Same day result tests will be promoted.

FSW Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
	• Same day result tests will be promoted.	• Same day result tests will be promoted.	• Same day result tests will be promoted.	
Mobile HCT	• Mobile HCT services will be arranged to the convenient time and place for FSW by health facilities coordinated with outreach services by NGO.	• Mobile HCT will be arranged to the convenient time and place for FSW by health facilities coordinated with outreach services by NGO.	• Mobile HCT will be arranged to the convenient time and place for FSW by health facilities coordinated with outreach services by NGO.	• Not needed
Community based HCT	• Pre-test and post-test counseling and finger pricked testing will be provided by NGO at selected DiC.	• Pre-test and post-test counseling and finger pricked testing will be provided by NGO at DiC (KhonKaen).	• Not needed	• Not needed
Treat				
ART initiation	• Referral for treatment	• Referral for treatment	• Referral for treatment	• At hospitals
ART monitoring	• According to national guidelines	• According to national guidelines	• According to national guidelines	• According to national guidelines
Retain				
Retain FSW living with HIV for treatment services	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or NGO; • Case management by NGOs, outreach workers for psychological and adherence support as well as reproductive health including positive prevention;	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or NGO; • Case management by NGOs, outreach workers for psychological and adherence support as well as reproductive health including positive prevention;	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or NGO; • Case management by NGOs, migrant health workers for psychological and adherence support as well as reproductive health including positive prevention;	• Case analysis of ART patients at hospitals for case management; followed up by hospitals, referral to nearby district hospitals and sub district hospitals, or CCC.

FSW Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
	• Intensive support will be provided by experienced NGOs for specific needed cases.			
Retain FSW tested negative for regular services	• Keep reached people with the services by memberships and community activities. • Reminding those with negative HIV tests for regular HCT by HCT units at health facilities • Real time monitoring will be applied to keep contact with registered individual.	• Keep reached people with the services by memberships and community activities. • Reminding those with negative HIV tests for regular HCT by HCT units at health facilities • Real time monitoring will be applied to keep contact with registered individual.	• Keep reached people with the services by memberships and community activities. • Real time monitoring will be applied to keep contact with registered individual.	• Reminding those with negative HIV tests for regular HCT by HCT units at health facilities

Table 1.4: Service packages for people who inject drugs

PWID Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
Criterion for type of service delivery	High number of PWID with high disease burden and complex social life	High number of PWID with high disease burden	New areas with some evidence reflecting quite high number of PWID	
Reach				
Mapping and planning	• Rapid community assessment will be conducted every 2 years for micro planning through participation of stakeholders in the implementation sites. The integration with provincial narcotic plan is encouraged.	• Rapid community assessment will be conducted every 2 years for micro planning through participation of stakeholders in the implementation sites. The integration with provincial narcotic plan is encouraged.	• Rapid community assessment will be conducted every 2 years for micro planning through participation of stakeholders in the implementation sites. The integration with provincial narcotic plan is encouraged.	• Not needed
Reach in person	• PWID will be reached through their social network and in MMT sites. • Vouchers will be given to PWID for getting sterile injecting equipment at drug stores. • Community activities will be organized to help identify and retain peer educators reaching their network. Meetings with community leaders and local stakeholders including police for more understanding on harm reduction to be organized regularly.	• PWID will be reached through their social network and in MMT sites. • Community activities will be organized to help identify and retain peer educators reaching their network. Meetings with community leaders and local stakeholders including police for more understanding on harm reduction will be organized regularly.	• PWID will be reached through their social network and in MMT sites. • Community activities will be organized to help identify and retain peer educators reaching their network. Meetings with community leaders and local stakeholders including police for more understanding on harm reduction will be organized regularly.	• Through MMT clinics
Reach by other channels	• Results of community	• Results of community	• Results of community	• Not needed

PWID Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
	assessment provide guidance on other means for PWID to get sterile injecting equipment.	assessment provide guidance on other means for PWID to get sterile injecting equipment.	assessment provide guidance on other means for PWID to get sterile injecting equipment.	
Commodities distribution	• Sterile injecting equipment, condoms and methadone maintenance	• Sterile injecting equipment, condoms and methadone maintenance	• Sterile injecting equipment, condoms and methadone maintenance	• Condoms, methadone maintenance
Recruit				
Recruit for HCT & STI screening; registered/or referred through direct contact	• Existing DiCs will be improved to increase the use by PWID for recruitment and/or referred for testing and STI screening; • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive PWID. • Extend the MMT to community at DiC or sub-district health promoting hospitals or community primary health care post. • Consider the screening for Hepatitis C and TB	• Existing DiCs will be improved to increase the use by PWID for recruitment and/or referred for testing and STI screening; • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive PWID. • Extend the MMT to community at DiC or sub-district health promoting hospitals or community primary health care post. • Consider the screening for Hepatitis C and TB	• For these new sites, the integration to the health service structure; i.e. sub-district or hospitals providing MMT will be considered as the DiC for PWID. • Encourage recruitment of their partners through couple counseling and testing partners of HIV positive PWID. • Extend the MMT to community at DiC or sub-district health promoting hospitals or community primary health care post.	• Recruitment will be done through MMT clinics.
Test				
Health facility HCT	• Same day result tests will be promoted.	• Same day result tests will be promoted.	• Same day result tests will be promoted.	• Same day result tests will be promoted.
Mobile HCT	• Mobile HCT services will be arranged at DiCs.	• Mobile HCT services will be arranged at DiCs.	• Not needed	• Not needed

PWID Service Packages				
	Package 1: Most intensive	Package 2: Intensive	Package 3: Context specific	Package 4: Basic package
Treat				
ART initiation	• Referral for treatment	• Referral for treatment	• Referral for treatment	• Referral for treatment
ART monitoring	• According to national guidelines	• According to national guidelines	• According to national guidelines	• According to national guidelines
Retain				
Retain PWID living with HIV for treatment services	• Case management by NGOs, outreach workers for psychological and adherence support as well as reproductive health including positive prevention;	• Case management by NGOs, outreach workers for psychological and adherence support as well as reproductive health including positive prevention;	• Case management by NGOs, migrant health workers for psychological and adherence support as well as reproductive health including positive prevention;	• According to hospital services
Retain PWID tested negative for regular services	• Using incentives to motivate them for regular safe injection, and HCT. • Real time monitoring will be applied to keep contact with registered individual.	• Using incentives to motivate them for regular safe injection, and HCT. • Real time monitoring will be applied to keep contact with registered individual.	• Using incentives to motivate them for regular safe injection and HCT. • Real time monitoring will be applied to keep contact with registered individual.	• Not needed

Table 1.5: Service packages for prisoners

Prisoner Service Packages		
	Package 1 : Most intensive	Package 4: Basic package
Criterion for type of service delivery	High number of prisoners; Disease burden provinces ranking 1-30	Disease burden provinces ranking 31-77
Reach		
Reach in person	• Train health staff in prisons and 'Prison guards' to provide knowledge, skills, and counseling on HIV/ STI/ and TB and to educate new 'prisoners in 'life skills' and HIV/ STI/ and TB risk reduction. • Peer educators provide knowledge to their friends on HIV/ STI/ and TB in an appropriate area such as 'information corner'. • Group activities will be organized to help identifying and keep peer educators to work closely with friends.	• Group sessions for information on HIV, STI and TB.
Commodities distribution	• Male condoms (Prisoners will be informed where to get condoms in the prison if needed)	• Male condoms (Prisoners will be informed where to get condoms in the prison if needed)
Recruit		
Recruit for HIV testing and STI screening; registered and or referred through direct contact for personal services	• Campaign based HCT recruitment will be organized twice a year in each prison. • STI services are provided at health stations in prisons.	• STI services are provided at health stations in prisons.
Test		
Mobile HCT	• Mobile HCT from hospitals will be provided as campaign based HCT twice a year in each prison.	• Not needed
Treat		
ART initiation	• Follow up activities from campaign based HCT.	• On individual case basis.
ART monitoring	• According to national guidelines when living inside and outside a prison	• According to national guidelines when living inside and outside a prison
Retain		
Retain prisoners living with HIV for treatment services	• Case management by health staff in prison for psychological and adherence support as well as reproductive health including 'positive prevention'; • Intensive support will be provided by experienced peer for specific/ as needed cases.	• Case management by health staff in prison for psychological and adherence support as well as reproductive health including positive prevention; • Post-release referral mechanism is designed and implemented.

Prisoner Service Packages		
	Package 1 : Most intensive	Package 4: Basic package
	• Post-release referral mechanism is designed and implemented.	
Retain prisoners tested negative for regular services	• Keep reached prisoners linked into prevention services through regular contact with health staff in prison, prison guard, and peer educators.	• Not applicable

Table 1.6: Services packages for youth in detention centers

Youth in Detention Centers Service Packages		
	Package 1 : Most intensive	Package 4: Basic package
Criterion for type of service delivery	Disease burden provinces ranking 1-30 and Juvenile detention centers located	Disease burden provinces ranking 31-77 and Juvenile detention centers located
Reach		
Reach in person	• Educate newcomers on 'HIV/ STI/ and reproductive health with effective media that is gender specific and appropriate for young people. • Train 'Health staff in youth detention centers' on counseling to provide both individual counseling and also group counseling to youth in detention centers. • Group activities are organized using participatory approach from youth in detention centers as well as group session with participation of their parents. • Information corners are arranged with participation from youth in detention centers	• Educate newcomers on HIV/STI and reproductive health with effective media that is gender specific and appropriate for young people. • Group sessions for information on HIV/ STI/ and reproductive health. • Information corners are arranged with participation from youth in detention centers
Commodities distribution	• Male condoms	• Male condoms
Recruit		
Recruit for HIV testing and STI screening; registered and or referred through direct contact for personal services	• Recruitment for HIV testing and STI services is through individual counseling.	• Recruitment for HIV testing and STI services is through individual counseling.
Test		
Health facility HCT	• Coordinate with hospitals in the respective provinces	• Coordinate with hospitals in the respective provinces
Treat		
ART initiation	• Coordinate with hospitals in the respective provinces	• Coordinate with hospitals in the respective provinces

Youth in Detention Centers Service Packages		
	Package 1 : Most intensive	Package 4: Basic package
ART monitoring	• According to national guidelines when living inside and outside detention centers	• According to national guidelines when living inside and outside detention centers
Retain		
Retain those living with HIV for treatment services	• Case management by health staff in detention centers for psychological and adherence support as well as reproductive health including positive prevention; • Post-release referral mechanism is designed and implemented.	• Case management by health staff in detention centers for psychological and adherence support as well as reproductive health including positive prevention; • Post-release referral mechanism is designed and implemented.
Retain those tested negative for regular services	Included in activities for out-reach, no specific activities	Included in activities for reach

Table 1.7: Services packages for migrants at higher risk

Migrants at higher risk		
	Package 1 : Most intensive	Package 4: Basic package
Criterion for type of service delivery	High number of migrants at high risk, i.e. working on fisheries, seafood processing, factory and construction workers	
Reach		
Mapping and microplanning	• Micro-level planning based on annual survey.	• Not needed
Reach in person	• Migrants at high risk will be reached through their social network. • Community activities will be organized to help identifying and keep peer educators working in the system	• Not needed
Commodities distribution	• Male condoms	• Male condoms
Recruit		
Recruit for HIV testing and STI screening; registered and or referred through direct contact for personal services	• Existing DiCs will be improved to increase the use by migrants for recruitment and/or referred for testing. • Referral coordination will be set up between outreach services and HCT and STI services.	• Information on where to receive HCT services provided.
Test		
Mobility HCT	• Mobile HCT services will be arranged to the convenient time and place for migrants by health facilities coordinated with outreach services by NGO.	• Not needed

Migrants at higher risk		
	Package 1 : Most intensive	Package 4: Basic package
Treat		
ART initiation	• Coordinate with hospitals in the respective provinces	• Coordinate with hospitals in the respective provinces
ART monitoring	• According to national guidelines	• According to national guidelines
Retain		
Retain those living with HIV for treatment services	• Monthly visit by outreach workers for cases who is willing to disclose him/her self to outreach workers.	• Not needed
Retain those tested negative for regular services	• Integrated with outreach services.	• Not needed

Annex 2: National Operational Indicators and Targets for Thailand's Ending AIDS: 2015-2019

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
REACH									
Number of individuals reached to prevention services									
Grand Total		805,138	317,085	400,918	509,424	577,174	644,005	697,976	710,249
Higher Risk MSM	Total	145,819	77,284	80,200	109,364	116,655	123,946	131,237	131,237
	Package 1: Most-intensive	37,819	20,044	20,800	28,364	30,255	32,146	34,037	34,037
	Package 2: Intensive	34,117	18,082	18,765	25,588	27,294	29,000	30,706	30,706
	Package 3: Context specific	26,464	14,026	14,555	19,848	21,171	22,494	23,817	23,817
	Package 4: Basic	47,419	25,132	26,080	35,564	37,935	40,306	42,677	42,677
Higher Risk TG	Total	28,532	19,259	19,973	21,399	22,826	24,252	25,679	25,679
	Package 1: Most-intensive	13,898	9,381	9,729	10,423	11,118	11,813	12,508	12,508
	Package 2: Intensive	4,513	3,046	3,159	3,385	3,611	3,836	4,062	4,062
	Package 3: Context specific	3,696	2,495	2,587	2,772	2,957	3,141	3,326	3,326
	Package 4: Basic	6,425	4,337	4,498	4,819	5,140	5,462	5,783	5,783
MSW	Total	16,970	2,558	12,728	13,576	15,273	15,273	15,273	15,273
	Package 1: Most-intensive	15,672	11,597	11,754	12,538	14,105	14,105	14,105	14,105
	Package 4: Basic	1,298	961	974	1,038	1,168	1,168	1,168	1,168
Venue based FSW	Total	106,318	57,412	69,106	74,422	85,054	95,686	95,686	95,686
	Package 1: Most-intensive	73,341	39,604	47,672	51,339	58,673	66,007	66,007	66,007
	Package 2: Intensive	16,105	8,697	10,468	11,273	12,884	14,494	14,494	14,494
	Package 3: Context specific	7,396	3,994	4,808	5,177	5,917	6,657	6,657	6,657
	Package 4: Basic	9,476	5,117	6,159	6,633	7,580	8,528	8,528	8,528

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
Non-Venue based FSW	Total	26,579	10,233	17,276	18,605	21,263	23,921	23,921	23,921
	Package 1: Most-intensive	18,335	7,059	11,918	12,835	14,668	16,502	16,502	16,502
	Package 2: Intensive	4,026	1,550	2,617	2,818	3,221	3,624	3,624	3,624
	Package 3: Context specific	1,849	712	1,202	1,294	1,479	1,664	1,664	1,664
	Package 4: Basic	2,368	912	1,539	1,658	1,895	2,131	2,131	2,131
PWID	Total	40,301	16,926	22,165	24,180	28,211	32,241	36,271	36,271
	Package 1: Most-intensive	14,734	6,188	8,103	8,840	10,314	11,787	13,260	13,260
	Package 2: Intensive	2,679	1,125	1,474	1,608	1,875	2,143	2,411	2,411
	Package 3: Context specific	2,910	1,222	1,600	1,746	2,037	2,328	2,619	2,619
	Package 4: Basic	19,978	8,391	10,988	11,987	13,985	15,982	17,980	17,980
Prisoner	Total	293,492	90,689	146,746	176,095	205,444	234,794	264,143	264,143
	Package 2: Intensive	210,343	64,996	105,172	126,206	147,240	168,274	189,309	189,309
	Package 4: Basic	83,149	25,693	41,575	49,889	58,204	66,519	74,834	74,834
Youth in detention centers	Total	26,042	-	-	10,417	11,719	13,021	14,323	15,625
	Package 2: Intensive	22,421	-	-	8,968	10,089	11,211	12,332	13,453
	Package 4: Basic	3,621	-	-	1,448	1,629	1,811	1,992	2,173
Migrant at high risk	Total	47,426	32,724	32,724	33,198	35,570	37,941	40,312	42,683
	Package 2: Intensive	32,796	22,629	22,629	22,957	24,597	26,237	27,877	29,516
	Package 4: Basic	14,630	10,095	10,095	10,241	10,973	11,704	12,436	13,167
Partner of PLHIV	Total	73,660	-	-	28,166	35,160	42,931	51,132	59,732
	Package 1: Partner of key population	8,037	-	-	5,626	6,028	6,429	6,831	7,233
	Package 2: Partner of PLHIV accessing ART	65,623	-	-	22,541	29,132	36,501	44,300	52,499

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
RECRUIT									
Number of individuals recruited to health services									
Grand Total		805,138		327,958	441,887	518,661	587,436	656,647	676,094
Higher Risk MSM	Total	145,819		58,327	72,909	87,491	102,073	116,655	123,946
	Package 1: Most-intensive	37,819		15,127	18,909	22,691	26,473	30,255	32,146
	Package 2: Intensive	34,117		13,647	17,059	20,470	23,882	27,294	29,000
	Package 3: Context specific	26,464		10,585	13,232	15,878	18,525	21,171	22,494
	Package 4: Basic	47,419		18,968	23,709	28,451	33,193	37,935	40,306
Higher Risk TG	Total	28,532		14,266	17,119	19,973	22,826	25,679	25,679
	Package 1: Most-intensive	13,898		6,949	8,339	9,729	11,118	12,508	12,508
	Package 2: Intensive	4,513		2,257	2,708	3,159	3,611	4,062	4,062
	Package 3: Context specific	3,696		1,848	2,218	2,587	2,957	3,326	3,326
	Package 4: Basic	6,425		3,213	3,855	4,498	5,140	5,783	5,783
MSW	Total	16,970		11,031	12,728	14,425	14,425	14,425	14,425
	Package 1: Most-intensive	15,672		10,187	1,754	13,321	13,321	13,321	13,321
	Package 4: Basic	1,298		844	974	1,103	1,103	1,103	1,103
Venue based FSW	Total	106,318		69,106	74,422	85,054	90,370	95,686	95,686
	Package 1: Most-intensive	73,341		47,672	51,339	58,673	62,340	66,007	66,007
	Package 2: Intensive	16,105		10,468	11,273	12,884	13,689	14,494	14,494
	Package 3: Context specific	7,396		4,808	5,177	5,917	6,287	6,657	6,657
	Package 4: Basic	9,476		6,159	6,633	7,580	8,054	8,528	8,528
Non-Venue based FSW	Total	26,579		17,276	18,605	21,263	22,592	23,921	23,921
	Package 1: Most-intensive	18,335		11,918	12,835	14,668	15,585	16,502	16,502

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
	Package 2: Intensive	4,026		2,617	2,818	3,221	3,422	3,624	3,624
	Package 3: Context specific	1,849		1,202	1,294	1,479	1,572	1,664	1,664
	Package 4: Basic	2,368		1,539	1,658	1,895	2,013	2,131	2,131
PWID	Total	40,301		20,150	22,165	26,195	30,226	34,256	34,256
	Package 1: Most-intensive	14,734		7,367	8,103	9,577	11,050	12,524	12,524
	Package 2: Intensive	2,679		1,340	1,474	1,741	2,009	2,277	2,277
	Package 3: Context specific	2,910		1,455	1,600	1,891	2,182	2,473	2,473
	Package 4: Basic	19,978		9,989	0,988	12,986	14,984	16,981	16,981
Prisoners	Total	293,492		132,071	161,421	190,770	220,119	249,468	249,468
	Package 2: Intensive	210,343		94,654	115,689	136,723	157,757	78,792	178,792
	Package 4: Basic	83,149		37,417	45,732	54,047	62,362	70,677	70,677
Youths detention centers	Total	26,042		5,729	9,115	10,417	11,719	13,021	14,323
	Package 2: Intensive	22,421		4,933	7,847	8,968	10,089	11,211	12,332
	Package 4: Basic	3,621		797	1,267	1,448	1,629	1,811	1,992
Migrant-High risk	Total	47,426		-	28,456	30,827	33,198	35,570	37,941
	Package 2: Intensive	32,796		-	19,678	21,317	22,957	24,597	26,237
	Package 4: Basic	14,630		-	8,778	9,510	10,241	10,973	11,704
Part-ners of PLHIV	Total	73,660		-	24,947	32,246	39,889	47,967	56,451
	Package 1: Partner of key population	8,037		-	5,224	6,028	6,429	6,831	7,233
	Package 2: Partner of PLHIV accessing ART	65,623		-	19,723	26,219	33,460	41,136	49,218

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
TEST									
Number of individuals received HIV tests									
Grand Total				**208,819**	**294,654**	**397,649**	**476,699**	**546,194**	**614,116**
MSM - Higher risk		145,819		51,036	58,327	72,909	87,491	102,073	116,654
TG - Higher risk		28,532		12,839	14,266	17,119	19,973	22,826	22,826
FSW		132,896		79,738	93,028	106,318	112,962	119,607	119,607
- Venue based FSW		106,318		63,791	74,422	85,054	90,370	95,686	95,686
- Non-venue based FSW		26,579		15,948	18,606	21,264	22,592	23,921	23,921
MSW		16,970		10,182	11,879	13,576	14,425	15,273	15,273
PWID		40,301		17,732	20,150	24,180	28,210	30,225	32,240
Prisoner		293,492		117,397	146,746	176,095	205,444	234,794	264,143
Youth in detention centers		26,042		5,729	7,813	9,115	10,417	11,719	13,021
Migrant-High risk		47,426		-	23,713	28,456	30,827	33,198	35,570
Partner of HIV+		73,660		-	21,728	28,931	36,445	44,401	52,768
-Partner of Key Populations		8,037		-	4,822	5,626	6,028	6,429	6,831
-Partner of PLHIV accessing ART		65,623		-	16,906	23,306	30,418	37,972	45,936
Number of community based HCT clinics that integrated in the drop in centers									
Grand Total		-				39	46	46	46
All gr.	Package 1: Most-intensive	-				24	28	28	28

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
	Package 2: Intensive	-				14	14	14	14
	Package 3:Context specific	-				1	4	4	4
Higher Risk MSM/TG	Total	-				16	19	19	19
	Package 1: Most-intensive	-				6	9	9	9
	Package 2: Intensive	-				9	9	9	9
	Package 3:Context specific	-				1	1	1	1
MSW	Total	-				5	5	5	5
	Package 1: Most-intensive	-				5	5	5	5
FSW	Total	-				6	9	9	9
	Package 1: Most-intensive	-				5	5	5	5
	Package 2: Intensive	-				1	1	1	1
	Package 3:Context specific	-				-	3	3	3
PWID	Total	-				12	13	13	13
	Package 1: Most-intensive	-				8	9	9	9
	Package 2: Intensive	-				4	4	4	4
	Package 3:Context specific	-				-	-	-	-
Number of mobile HCT visits									
Grand Total		257				257	257	257	257
All gr.	Package 1: Most-intensive	101				101	101	101	101
	Package 2: Intensive	88				88	88	88	88
	Package 3:Context specific	68				68	68	68	68
Higher Risk MSM/TG	Total	144				144	144	144	144
	Package 1: Most-intensive	36				36	36	36	36

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
	Package 2: Intensive	40				40	40	40	40
	Package 3:Context specific	68				68	68	68	68
MSW	Total	20				113	113	113	113
	Package 1: Most-intensive	20				20	20	20	20
FSW	Total	93				93	93	93	93
	Package 1: Most-intensive	45				45	45	45	45
	Package 2: Intensive	48				48	48	48	48
TREAT									
Number of health facilities that implemented task sharing and Task shifting approaches									
Package 1: Implemented outreach activities and community mobilization for early testing and treatment									
	Total					782	782	782	782
	BMA Health centers					68	68	68	68
	MOPH health promotion hospitals					714	714	714	714
Package 2: Provided HIV counseling and testing (only among large size hospitals)									
	Total					244	388	388	388
	BMA Health centers					12	15	15	15
	MOPH health promotion hospitals					232	373	373	373
Package 3: Provided ART support services among ART patients who are on treatment for one year and more									
	Total					244	388	388	388
	BMA Health centers					12	15	15	15
	MOPH health promotion hospitals					232	373	373	373

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
Package 4: ART provision at point of care including support services									
	Total					122	310	388	388
	BMA Health centers					6	12	15	15
	MOPH health promotion hospitals					116	298	373	373
RETAIN									
Number of PLHIV support groups for KPs established and strengthened to support ART adherence including psychosocial support									
	Total					313	400	400	400
	KP-PLHIV group					54	56	56	56
	Holistic care center					259	344	344	344
SYSTEM STRENGTHENING									
Number of health services participated in branding services including quality control and assurance									
	Total					335	378	378	378
	BMA and MOPH Hospitals					59	95	95	95
	BMA Health centers					16	16	16	16
	Private hospital and clinic					32	32	32	32
	Drug stores					185	185	185	185
	Specialize clinics: TRC, PATH					4	4	4	4
	Community based HCT clinics					39	46	46	46

National operational indicators and targets: 2015-2019									
Target Popula-tions	Service packages	Total	Baseline 2012	Baseline 2014	2015	2016	2017	2018	2019
Number of AIDS competence Tambol conducted community mobilizations to support early diagnosis and treatment and normalize HIV									
	Total					244	388	388	388
	District AIDS Administration					12	15	15	15
	Tambol Administration					232	373	373	373
ENABLING ENVIRONMENT									
Number of provinces with human right protection mechanism including crisis response team established/strengthened									
	Total					14	20	24	30
Number of provinces and hospitals implemented stigma and discrimination interventions in health care settings									
	Total number of hospitals					476	577	633	739
	Number of provinces					14	20	24	30
STRATEGIC INFORMATION and M&E									
Number of provinces has strengthened on strategic information									
	Total					14	20	24	30

Annex 3: Indicators definition

<table>
<tr><th colspan="2">Indicator 1: Reached</th></tr>
<tr><td colspan="2">Number of key populations having access to preventive services (person)
Key populations: Men who have sex with men (MSM), Transgender people (TG), Male Sex Worker (MSW), Female Sex Worker (FSW) and People Who Inject Drugs (PWID)</td></tr>
<tr><td>What it measures</td><td>This indicator measures the progress of how many key populations accessed the HIV and STI preventive services in order to measure the coverage of key populations reached.</td></tr>
<tr><td>Rationale</td><td>The HIV prevalence rates among key populations are still high. To end AIDS, we have to reach key populations in order to provide combination of HIV prevention services including safe behaviours and create their demands to know their own HIV status. The early diagnosis and linked to ART is key intervention for ending AIDS in Thailand.</td></tr>
<tr><td>Definition</td><td>Key populations who accessed to preventive services through outreach workers or peers network or social media or appointment from health facilities will be counted as persons reached when they received the following service packages:
1. <u>Through outreach workers or peers network.</u> Consider those who received all the following 4 services:
(1) Information of HIV and STI prevention and harm reduction from using drug (for PWID);
(2) Condoms, lubricants (for MSM, MSW and FSW) and sterile injection kits (for PWID);
(3) Information on where they can get HIV testing services, STI screening, diagnosis and treatment and methadone maintenance therapy (for PWID) <u>OR</u> they were referred to HIV testing, STI services or MMT (for PWID); and
(4) Being registered with membership number <u>OR</u> UIC (Unique Identifier Code)
2. <u>Through social media.</u> Consider those who received all the following 3 services:
(1) Information of HIV and STI prevention and harm reduction from using drug (for PWID);
(2) Information on where they can get HIV testing services, STI screening, diagnosis and treatment and methadone maintenance therapy (for PWID); and
(3) Being registered with membership number <u>OR</u> UIC (Unique Identifier Code)
3. <u>Self access or through appointments from health facilities or mobile services.</u> Consider those who received all the following 4 services:
(1) Information of HIV and STI prevention and harm reduction from using drug (for PWID);
(2) Condoms, lubricants (for MSM, MSW and FSW) and sterile injection kits (for PWID);
(3) Information on where they can get HIV testing services, STI screening, diagnosis and treatment and</td></tr>
</table>

Indicator 1: Reached	
	methadone maintenance therapy (for PWID) <u>OR</u> they were referred to HIV testing, STI services or MMT (for PWID); and (4) Being registered with membership number <u>OR</u> UIC (Unique Identifier Code)
Frequency of data collection	<u>Region /Country Level:</u> Every 3 months (January, April, July and October) <u>Provincial Level:</u> Every month
Collection tools	The RIHIS-outreach Service Record Form. Record data for every contact in order to understand the workload; and use it as basic information to comprehend the degree of communication to convince the target population to have HIV or STI screening test.
Data disaggregation and analysis	A. <u>Data disaggregation</u> 1. Disaggregated by subgroup as MSM, TG, MSW, FSW, PWID, with nationality as Thai or non-Thai (specified nationality) 2. Disaggregated for each group as: ▪ New comer (No previous services access experience) ▪ New, for this year (Has accessed to services in the previous years) ▪ Repeated visit for this year 3. Disaggregated by age group (Under 15, 15-19, 20-24, 25-49, 50 and above) B. <u>Coverage</u> 1. Calculate the overall coverage of each key population group by percentage based on number of people who accessed to the preventive service divided by the estimated number of the key population (country, province) 2. Calculate the coverage of each key population group identified through community mapping; using numbers of people who accessed to preventive services divided by the number of key population determined by community mapping method (province, catchment areas) C. <u>Composition of those reached</u> Calculate the proportion of people who accessed to the services based on the data disaggregation described in item A. D. <u>Achievements.</u> Calculate the results as the percentage of the targets set for each period.

Indicator 1: Reached	
Interpretation and utilization	• Number of new persons who have never accessed to the services before reflects the progress of coverage of the target population • Finding someone who has received the service before and came as the first time of the year indicates the continual contacts which will encourage them in their regular attendance for HIV testing and STI screening • Compare the results of implementation with the defined targets and the estimated number from community mapping by quarter as well as cumulative targets indicates which sites and target population should be more focused. Service providers Monthly data analysis Province / Region/ Country Level Quarterly data analysis

Indicator 2: Recruited	
Number of key populations having access to preventive services (person) The key populations: Men who have sex with men (MSM), Transgender people (TG), Male Sex Worker (MSW), Female Sex Worker (FSW) and People Who Inject Drugs (PWID)	
What it measures	This indicator measures the progress of how many key populations being recruited for HIV testing or STI screening, diagnosis and treatment or MMT in order to measure the coverage of key populations recruited to HIV testing or STI or MMT services.
Rationale	To know their HIV status, and to have an early treatment if positive are the key factors for ending AIDS. Hence to reach key populations is not only to promote safe sex but to encourage them to receive HIV testing, STI and MMT services.
Definition	Key populations who were recruited to HIV testing services - pre-test counseling, either tested or not tested or STI screening, diagnosis and treatment or MMT. They can be recruited through following methods: 1. Referred from outreach workers, peers network, drug stores, or through social media to health facilities, Drop-in Centers or mobile services; 2. Self access or through appointments from health facilities or Drop-in Centers or mobile services.
Frequency of data collection	Region /Country Level: Every 3 months (January, April, July and October) Provincial Level: Every month

Indicator 2: Recruited	
Collection tools	The RIHIS-VCT&STI Record Forms and MMT record forms at the health facilities, or at mobile service units. Record data of every visit - with indicated UIC (Unique Identifier Code) and ID number to enable a linkage between outreach services and treatment services.
Data disaggregation and analysis	A. <u>Data disaggregation</u> 1. Disaggregated by subgroup as MSM, TG, MSW, FSW, PWID, with nationality as Thai or non-Thai (specified nationality) 2. Disaggregated for each group as: ▪ New comer (No previous services access experience) ▪ New, for this year (Has accessed to services in the previous years) ▪ Repeated visit for this year 3. Disaggregated by age group (Under 15, 15-19, 20-24, 25-49, 50 and above) 4. Disaggregated by the routes to be recruited of each population group (item 1, 2 and 3 above) B. <u>Demand reation for services</u> Calculate percentages of each group of target populations who were reached that were recruited for HIV testing or STI services or MMT as overall and by implementation sites. *Numerator*: number of target population recruited for HIV testing services (pre-test counseling), who might be tested or not tested; or STI services or MMT *Denominator*: number of target population reached C. <u>Composition of those recruites</u> Calculate the proportion of people recruited to the services based on the variables described in item A. D. <u>Achievements.</u> Calculate the results as the percentage of the targets set for each period.

Indicator 2: Recruited	
Interpretation and utilization	• Number of new persons who have never been recruited to the services before reflects the progress of coverage of the target population • Finding someone who has received the service before and come as the first time of the year indicates the continual contacts which will encourage them in their regular attendance for HIV testing and STI screening • High percentage of those reached who were recruited indicates the efficiency of creating awareness and facilitating to get the HIV testing or STI or MMT services. • Number of persons recruited who visit the health facilities or mobile service units indicated the friendly and convenient services as well as the effectiveness of campaign's efforts. Service providers Monthly data analysis Province / Region/ Country Quarterly data analysis

Indicator 3: Tested	
Number of key populations who received an HIV test and knew the result (person) Key populations: Men who have sex with men (MSM), Transgender people (TG), Male Sex Worker (MSW), Female Sex Worker (FSW) and People Who Inject Drugs (PWID)	
What it measures	This indicator measures the progress of how many key populations received an HIV test and knew the result in order to measure the coverage of key populations receiving an HIV test and knew the result.
Rationale	To know their HIV status, and to have an early treatment if positive are the key interventions for ending AIDS. This must be at sufficient coverage. The emphasis is on the follow up those who received an HIV test but do not return for the test result - those who are positive needs early treatment, meanwhile those who are negative need an understanding of the necessity of the prevention and the importance of having regular testings.

Indicator 3: Tested	
Definition	Key populations tested will be counted only for those who received an HIV test and knew the result. They could receive an HIV test at the following service points: 1. Government health facilities, including 1.1 Regional hospitals or general hospitals, or community hospitals (under the MoPH) 1.2 University hospitals or big government hospitals (under other ministries and BMA) 1.3 Sub-district health promoting hospitals or BMA's health services centers 2. Private healthcare facilities including hospitals and clinics 3. Civil society's service units, such as Drop-in centers 4. Mobile services organized by government, private or civil society organizations
Frequency of data collection	Region /Country Level: Every 3 months (January, April, July and October) Provincial Level: Every month
Collection tools	The RIHIS-VCT&STI Record Forms at the health facilities, or at mobile service units. Record data of every visit - with indicated UIC (Unique Identifier Code) and ID number to enable a linkage with outreach services and treatment services. The NHSO is improving its NAP Plus system to record variables on key populations and knowing the test results.

<table>
<tr><th colspan="2">Indicator 3: Tested</th></tr>
<tr><td>Data disaggregation and analysis</td><td>A. <u>Data disaggregation</u>
1. Disaggregated by subgroup as MSM, TG, MSW, FSW, PWID, with nationality as Thai or non-Thai (specified nationality)
2. Disaggregated for each group as:
▪ New comer (No previous services access experience)
▪ New, for this year (Has accessed to services in the previous years)
▪ Repeated visit for this year
3. Disaggregated by age group
(Under 15, 15-19, 20-24, 25-49, 50 and above)
B. <u>Coverage</u>
1. Calculate percentages of each group of target populations who received an HIV test and knew the result.
Numerator: number of target population who received an HIV test and knew the result for the first time during the reporting year, either the first test for his/her life or the first time for this reporting year.
Denominator: estimated number of target population
2. Calculate percentages of each group of target populations who received an HIV test and knew the result in the catchment area by using number of target population determine by community mapping as a denominator.
C. <u>Service units</u>
Calculate the proportion of target population group who received an HIV test at different type of service units.
D. <u>Composition of tested persons</u>
Calculate proportion of those who received the first HIV test or the first test for the reporting year disaggregated by variables described in item A.
E. <u>Knowing the results of HIV testing</u>
Calculate the proportion of those receiving an HIV test who did not know the result disaggregated by service units, test results and variables described in item A.
F. <u>Early diagnosis of HIV infection</u>
1. Calculate proportion of those whose results were positive who had CD4 count within 1 month after tested disaggregated by variables described in item A.
2. Calculate proportion of those had CD4 results within 1 month after tested by CD4 level (≤200, 201-349, 350-500, >500 cell/cu.mm.) and disaggregated by variables described in item A.
G. <u>Achievements.</u>
Calculate the results as the percentage of the targets set for each period.</td></tr>
</table>

Indicator 3: Tested	
Interpretation and utilization	• Number of new person receiving an HIV test reflects the progress of coverage of HIV testing provided to target populations. • Finding someone who received an HIV test before and come as the first time of the year indicates the continual contacts which will encourage them in their regular attendance for HIV and STI screening • A high positive rate among those receiving HIV test reflects that target population tested are at higher risk. Understanding of who are these groups will guide whom the program should try to reach. • If there are high numbers of people who do not receive the test results, same-day result test and pre-test counseling services should be considered and improved. <u>Service providers</u>: Monthly data analysis <u>Province / Region / Country Levels:</u> Quarterly data analysis

Indicator 4: Treated	
Number of key populations who initiated the ARV treatment (person) Key populations: Men who have sex with men (MSM), Transgender people (TG), Male Sex Worker (MSW), Female Sex Worker (FSW) and People Who Inject Drugs (PWID)	
What it measures	This indicator measures the progress in enrolment of key population group living with HIV into the ART services.
Rationale	Early ART for PLHIV is a key intervention to end AIDS, which has to be at sufficient coverage. Currently, according to the national guideline, every PLHIV is eligible to initiate ART at any CD4 level. Although the PLHIV is diagnosed early, delayed initiation of ART will impede not only the good result of treatment but also the advantage of treatment as prevention.

Indicator 4: Treated	
Definition	Key populations living with HIV will be counted as treated when they were registered to treatment and started ART. They might be enrolled at following service sites: 1. Government health facilities, including 1.1 Regional hospitals or general hospitals, or community hospitals (under the MoPH) 1.2 University hospitals or big government hospitals (under other ministries and BMA) 1.3 Sub-district health promoting hospitals or BMA's health services centers 2. Private healthcare facilities, including hospitals and private clinics By utilizing the medical benefits from various benefit systems, or pay by themselves, i.e. 1. Universal Coverage 2. Social Security Scheme 3. Civil Servant Medical Benefits Scheme 4. Migrant Health Insurance
Frequency of data collection	Region /Country Level: Every 3 months (January, April, July and October) Provincial Level: Every month
Collection tools	1. NAP Plus 2. NAPHA extension (for migrants) 3. Information from the Government Pharmaceutical Organization (GPO) and estimation from the medical doctors for those who do not use any insurance scheme

Indicator 4: Treated	
Data disaggregation and analysis	A. Data disaggregation 1. Disaggregated by subgroup as MSM, TG, MSW, FSW, PWID, with nationality as Thai or non-Thai (specified nationality) 2. Disaggregated by age group (Under 15, 15-19, 20-24, 25-49, 50 and above) 3. Disaggregated by types of insurance scheme or paid by themselves 4. Disaggregated by types of health facilities B. Coverage 1. Calculate the proportion of PLHIV registered for treatment that had initiated ART. 2. Calculate the proportion of PLHIV registered for treatment that had initiated ART by types of health facilities and by hospitals. C. Early ART initiation 1. Calculate the proportion of PLHIV registered for treatment that had initiated ART within 1 month after diagnosis, disaggregated by variables described in item A. 2. Calculate the proportion of PLHIV initiating ART by CD4 levels (<200, 200-349, 350-499 and ≥500 cell2cu.mm.) or calculate the median of CD4 level, disaggregated by variables described in item A. D. Achievements. Calculate the results as the percentage of the targets set for each period.
Interpretation and utilization	• The treatment coverage analysis shows the effectiveness of the linkage system of HIV testing services and treatment units. • The analysis of delayed ART initiation classified by population group and by the HIV testing units and by sites will indicate the areas of improvement. • The delayed treatment reflected from CD4 level at the period of ART initiation has to be compared with the CD4 level at the time of diagnosis in order to understand whether the delayed treatment is due to late detection or weakness of linkages between HIV testing and treatment. Health facilities Monthly data analysis and plan how to follow up those that had not started ART Province / Region / Country Levels Quarterly data analysis

Indicator 5: Persons with +ve result of HIV test Retained	
Number of key populations who initiated ART retained for continuous treatment (person) Key populations: Men who have sex with men (MSM), Transgender people (TG), Male Sex Worker (MSW), Female Sex Worker (FSW) and People Who Inject Drugs (PWID)	
What it measures	This indicator measures the progress of the treatment programme in retaining the key populations on ART adhered to treatment.
Rationale	Early ART for PLHIV is a key intervention to end AIDS, which has to be at sufficient coverage. The adherence to ART will suppress viral load which provide good results of treatment as well as reduction of transmission of HIV to partners. Thus, it is necessary to monitor those whose HIV tests were positive to initiate ART and adhered to ART aiming at viral load suppression.
Definition	1. The target populations whose HIV tests were positive, including those that initiated ART and had not initiated ART yet adhered to the treatment services; loss to follow up less than 90 days in a year. 2. For those who initiated the ART, they are on ART at 12, 24, 36 and 60 months after their ART initiation.
Frequency of data collection	Regional /Country Level: Every 12 months Provincial Level: Every 3 months (January, April, July and October)
Collection tools	1. NAP Plus 2. NAPHA (for migrants)
Data disaggregation and analysis	A. Data disaggregation 1. Disaggregated by subgroup as MSM, TG, MSW, FSW, PWID, with nationality as Thai or non-Thai (specified nationality) 2. Disaggregated by age group (Under 15, 15-19, 20-24, 25-49, 50 and above) 3. Disaggregated by types of insurance scheme or paid by themselves 4. Disaggregated by types of health facilities B. Loss to follow up 1. Calculate the overall percentage of PLHIV loss to follow up more than 90 days / year. 2. Calculate the percentages of those initiated ART and those not initiated ART that loss to follow up more than 90 days / year.

Indicator 5: Persons with +ve result of HIV test Retained	
	3. Calculate the loss to follow up rates for each population group according to the disaggregation described in item A. C. ART retention 1. Calculate ART retention rates at 12, 24, 36 and 60 months after ART initiation. 2. Calculate ART retention rates each group according to the disaggregation described in item A. D. Achievements. Calculate the results as the percentage of the targets set for each period.
Interpretation and utilization	• The services unit should identify, on monthly basis, those on ART who missed the appointment in order to follow them up. Meanwhile, those that had not initiated the ART yet should be listed to consider the information and/or counseling to be provided for their decision to initiate ART. • If there are many PLHIV had not initiated the ART, its causes have to be identified. Doctors may not know the changed criteria that ART can be provided to all PLHIV regardless of CD4 level or they may need more information regarding the benefits of early ART initiation. On the other hand, PLHIV themselves may need more information and additional counseling. Health facilities Monthly data analysis Province / Region / Country Level Quarterly data analysis

Indicator 6: Persons with -ve result of HIV test Retained	
Number of key populations who tested negative and retained in the service system (person) Key populations: Men who have sex with men (MSM), Transgender people (TG), Male Sex Worker (MSW), Female Sex Worker (FSW) , and People Who Inject Drugs (PWID)	
What it measures	This indicator measures the progress of the system that keep recruited key populations for regular HIV testing meanwhile maintain their safe behaviours.
Rationale	Early ART for HIV positive person is an important measure to end AIDS. A regular HIV testing among key populations will help early detection of HIV infection. Providing post-test counseling to those with HIV-negative results aims at maintain their safe behaviours and convincing them for the benefits of regular HIV testing.

Indicator 6: Persons with -ve result of HIV test Retained	
Definition	Those whose HIV test were negative will be counted as a person retained when they received the repeating HIV test and knew the result, including: 1. The second HIV test in the same year for those who received HIV testing for the first time in that year 2. The first HIV test of that year for those who had an HIV test in the previous year. They could receive an HIV test at the following service points: 1. Government health facilities, including 1.1 Regional hospitals or general hospitals, or community hospitals (under the MoPH) 1.2 University hospitals or big government hospitals (under other ministries and BMA) 1.3 Sub-district health promoting hospitals or BMA's health services centers 2. Private healthcare facilities including hospitals and clinics 3. Civil society's service units, such as Drop-in centers 4. Mobile services organized by government, private or civil society organizations
Frequency of data collection	Regional /Country Level: Every 3 months (January, April, July and October) Provincial Level: Every month
Collection tools	The RIHIS-VCT Service Record Form at the health facilities, mobile service units or community-based HIV testing service units. Record data of every visit - with indicated UIC (Unique Identifier Code) and ID no. This will enable a linkage with outreach services and care and treatment. The NHSO is improving its NAP Plus system to record variables on key populations and knowing the test results.
Data disaggregation and analysis	A. Data disaggregation 1. Disaggregated by subgroup as MSM, TG, MSW, FSW, PWID, with nationality as Thai or non-Thai (specified nationality) 2. Disaggregated by age group (Under 15, 15-19, 20-24, 25-49, 50 and above) 3. Disaggregated by types of health facilities B. Coverage 1. Calculate the percentages of those whose their HIV tests were negative that came for retests for each key population group. 2. Calculate proportion of those came for retests by types of service facilities.

Indicator 6: Persons with -ve result of HIV test Retained	
	C. New infections Calculate sero-conversion rates among those coming for retests E. Achievements. Calculate the results as the percentage of the targets set for each period.
Interpretation and utilization	• If the coverage of those whose HIV test results were negative having repeated HIV test is low, the improvement of post-test counseling services on providing information of benefits of regular HIV testing in order to diagnose HIV infection and be treated early could increase the retention of target population to the service system. • The high sero-conversion rate indicates the needs to improve post-test counseling on making understanding of maintaining safe behaviors. Health facilities Monthly data analysis Province / Regional / Country Levels Quarterly data analysis

Annex 4: Prioritized provinces for each key populations and migrants at high risk

Table 4.1: First 11 priority provinces with target populations of each service package

No.	Province name	Package 1	Package 2	Package 3
1	BANGKOK	MSM, TG, MSW, FSW, PWID	MW	
2	SAMUT PRAKAN*		MSM, TG, PWID	FSW
3	NONTHABURI*		MSM, TG, PWID	
4	PATHUM THANI*		MSM, TG, PWID	
5	CHIANG MAI	MSM, TG, MSW, FSW, PWID	MW	
6	NAKHON RATCHASIMA		MSM, TG, FSW	
7	CHON BURI	MSM, TG, MSW, FSW	MW	
8	KHON KAEN		MSM, TG, FSW	
9	NAKHON SI THAMMARAT		MSM, TG, FSW, PWID	
10	UBON RATCHATHANI		MSM, TG	FSW
11	PHUKET	MSM, TG, MSW, FSW	MW	

* considered as part of Greater Bangkok

Table 4.2: Provinces ranking by burden of HIV and service packages (most intensive: 1; intensive: 2; specific context: 3) for each target populations

Ranking by burden of HIV	Province	Service package						
		MSM/TG	MSW/TGSW	FSW	PWID	Prisoner	Youth in detention centers	Migrants
1	BANGKOK	1	1	1	1	2	2	2
2	SAMUT PRAKAN	2		3	2	2	2	2
3	NONTHABURI	2			2	2	2	
4	PATHUM THANI	2			2	2	2	2
5	CHIANG MAI	1	1	1	1	2	2	2
6	NAKHON RATCHASIMA	2		2		2	2	
7	CHON BURI	1	1	1		2	2	2
8	KHON KAEN	2		2		2	2	
9	NAKHON SI THAMMARAT	2		2	2	2	2	
10	UBON RATCHATHANI	2		3		2	2	
11	PHUKET	1	1	1		2	2	2
12	SONGKHLA	2		1	2	2	2	2
13	SURAT THANI	3		1	2	2	2	
14	UDON THANI	2		2		2	2	
15	PHRA NAKHON SI AYUTTHAYA	3		2		2	2	
16	NAKHON PATHOM			2		2	2	
17	RAYONG	3		3		2	2	2
18	BURI RAM	3		2		2	2	
19	CHIANG RAI	3			2	2	2	
20	ROI ET					2		
21	PATTANI				1	2	2	

Ranking by burden of HIV	Province	Service package						
		MSM/TG	MSW/TGSW	FSW	PWID	Prisoner	Youth in detention centers	Migrants
22	SAMUT SAKHON			3		2		2
23	NAKHON SAWAN			2		2	2	
24	SUPHAN BURI					2	2	
25	SI SA KET					2		
26	LOP BURI	3		2		2		
27	KALASIN				3	2		
28	SURIN					2		
29	NARATHIWAT			2	1	2	2	
30	SAKON NAKHON	3				2		
31	MAHA SARAKHAM	3						
32	PHETCHABUN							
33	YALA			2	1			
34	PHITSANULOK	3				2	2	
35	CHAIYAPHUM							
36	SARABURI						2	
37	CHACHOENGSAO			2				
38	KANCHANABURI			3				2
39	LOEI			3	3			
40	RATCHABURI	3		2		2		
41	KAMPHAENG PHET							
42	PRACHIN BURI							

Ranking by burden of HIV	Province	Service package						
		MSM/TG	MSW/TGSW	FSW	PWID	Prisoner	Youth in detention centers	Migrants
43	CHUMPHON	3		3				
44	LAMPANG	3						
45	TRANG	3		2	3			
46	PRACHUAP KHIRI KHAN			1				
47	MUKDAHAN	3		3				
48	NAKHON PHANOM	3		3			2	
49	SUKHOTHAI							
50	PHETCHABURI							
51	NONG BUA LAM PHU							
52	LAMPHUN	2						
53	YASOTHON							
54	NAN							
55	KRABI			1				
56	SA KAEO			3				
57	TAK			3	2			2
58	PHANGNGA			2				
59	PHICHIT							
60	CHANTHABURI							
61	NONG KHAI	3		3				
62	AMNAT CHAROEN							
63	PHAYAO	3						

Ranking by burden of HIV	Province	Service package						
		MSM/TG	MSW/TGSW	FSW	PWID	Prisoner	Youth in detention centers	Migrants
64	BUENG KAN							
65	RANONG			3				2
66	UTTARADIT							
67	TRAT							2
68	PHRAE							
69	CHAINAT							
70	SATUN			2	3			
71	PHATTHALUNG				3			
72	SAMUT SONGKHRAM			3				
73	MAE HONG SON				3			
74	NAKHON NAYOK							
75	SING BURI							
76	UTHAI THANI							
77	ANG THONG							

Annex 5: Details of costing for operation of National Accelerating Ending AIDS Plan for 2015-2019

Table 5.1: Cost of service delivery for RRTTR by service packages, 2015 and 2016, not including commodities (in mil. THB)

Deliver services		Fiscal year 2015					Fiscal year 2016				
		Package 1	Package 2	Package 3	Package 4	Total	Package 1	Package 2	Package 3	Package 4	Total
Reach		69.5	73.0	46.1	2.7	191.3	69.0	73.2	45.8	3.0	190.8
1	Mapping and microplanning	1.9	1.9	1.2	1.5	6.5	1.4	2.7	1.7	1.5	7.3
2	Reach in person	63.7	67.1	38.2	1.2	170.2	63.9	67.0	38.2	1.3	170.3
3	Reach by other means	3.9	4.0	6.8	0	14.7	3.7	3.5	5.9	0	13.1
Recruit		25.1	13.9	2.0	1.2	42.3	26.4	13.8	2.1	0	42.4
1	Recruit for HCT and STI registered and/or referred through direct contact for personal services	25.0	13.9	2.0	1.2	42.2	26.4	13.8	2.1	0	42.3
2	Recruit for HCT and STI registered and/or referred through social media and telephones	0.1	0	0	0	0.1	0.2	0	0	0	0.2
Test		15.0	4.3	3.1	0	22.4	19.0	8.3	3.1	0	30.4
1	Health facility HCT	0	0	0	0	0	0	0	0	0	2.4
2	Mobile HCT	2.9	3.8	3.1	0	9.7	2.9	3.7	3.1	0	9.7
3	Community based HCT	12.1	0.6	0	0	12.7	16.1	4.6	0	0	20.7
Treat		0.2	0.2	0.2	0.2	0.7	0.2	0.2	0.2	0.2	0.7
1	ART initiation	0.2	0.2	0.2	0.2	0.7	0.2	0.2	0.2	0.2	0.7
Retain		3.4	4.3	2.4	3.0	13.1	3.5	5.7	2.5	4.0	15.6
1	Retain PLHIV adhered to treatment	1.6	3.0	1.0	1.2	6.9	1.6	4.3	1.0	2.2	9.2
2	Retain those tested negative for regular HCT	1.8	1.4	1.4	1.7	6.3	1.9	1.4	1.4	1.8	6.4
	Total	113.2	95.6	53.9	7.1	269.7	118.3	101.1	53.7	6.8	280.0

Table 5.2: Cost of service delivery for RRTTR by service packages, 2017 and 2018, not including commodities (in mil. THB)

Deliver services		Fiscal year 2017					Fiscal year 2018				
		Package 1	Package 2	Package 3	Package 4	Total	Package 1	Package 2	Package 3	Package 4	Total
Reach		69.8	72.7	45.3	3.0	190.6	76.9	73.4	45.8	2.8	199.0
1	Mapping & microplanning	1.9	1.9	1.2	1.5	6.5	1.4	2.7	1.7	1.5	7.3
2	Reach in person	64.2	67.3	38.2	1.3	171.0	71.8	67.2	38.2	1.3	178.5
3	Reach by other means	3.7	3.5	5.9	0	13.1	3.7	3.5	5.9	0	13.1
Recruit		28.1	16.4	3.1	0	47.6	27.9	15.7	3.7	0	47.4
1	Recruit for HCT and STI registered and/or referred through direct contact for personal services	27.9	16.4	3.1	0	47.4	27.7	15.7	3.7	0	47.2
2	Recruit for HCT and STI registered and/or referred through social media and telephones	0.2	0	0	0	0.2	0.2	0	0	0	0.2
Test		20.2	8.3	3.1	0	31.6	20.2	8.3	3.1	0	31.6
1	Health facility HCT	0	0	0	0	0	0	0	0	0	0
2	Mobile HCT	2.9	3.7	3.1	0	9.7	2.9	3.7	3.1	0	9.7
3	Community based HCT	17.3	4.6	0	0	21.9	17.3	4.6	0	0	21.9
Treat		0.2	0.2	0.2	0.1	0.7	0.2	0.2	0.2	0.1	0.7
1	ART initiation	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.7
Retain		3.6	5.7	2.5	4.0	15.8	3.6	5.7	2.5	4.0	15.9
1	Retain PLHIV adhered to treatment	1.6	4.3	1.0	2.2	1.2	1.6	4.3	1,0	2.2	9.2
2	Retain those tested negative for regular HCT	2.0	1.4	1.5	1.8	6.6	2.0	1.4	1.5	1.8	6.7
Total		121.8	103.3	54.2	6.9	286.2	128.8	103.3	55.4	7.0	294.4

Table 5.3: Cost of service delivery for RRTTR by service packages, 2019 not including commodities (in mil THB)

Deliver services		Fiscal year 2019				
		Package 1	Package 2	Package 3	Package 4	Total
Reach		70.1	72.8	45.3	2.8	191.0
1	Mapping and microplanning	1.9	1.9	1.2	1.5	6.5
2	Reach in person	64.5	67.4	38.2	1.3	171.4
3	Reach by other means	3.7	3.5	5.9	0	13.1
Recruit		28.0	15.6	3.3	0	46.9
1	Recruit for HCT and STI registered and/or referred through direct contact for personal services	27.8	15.6	3.3	0	46.7
2	Recruit for HCT and STI registered and/or referred through social media and telephones	0.2	0	0	0	0.2
Test		20.2	8.3	3.1	0	31.6
1	Health facility HCT	0	0	0	0	0
2	Mobile HCT	2.9	3.7	3.1	0	9.7
3	Community based HCT	17.3	4.6	0	0	21.9
Treat		0.2	0	0	0	0.2
1	ART initiation	0.2	0	0	0	0.2
Retain		3.6	5.7	2.5	4.0	15.9
1	Retain PLHIV adhered to treatment	1.6	4.3	1.0	2.2	9.2
2	Retain those tested negative for regular HCT	2.0	1.4	1.5	1.8	6.7
Total		122.0	102.6	54.4	7.0	286.0

Table 5.4: Cost of commodities for service delivery, 2015-2019 (THB)

Commodities	Target populations	Unit	Unit cost	Number/ person/yr	Fiscal year 2015	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019	Total 2015-2019
1. Condoms	Total	piece	1.20		137,039,738	153,465,859	168,718,683	174,429,742	175,195,607	808,849,629
	MSM	piece		276						
	FSW	piece		600						
	MSW	piece		600						
	PWID	piece		52						
	Prisoner	piece		52						
	Youth in detention centers	piece		52						
	Migrant	piece		52						
	Partner of HIV+	piece		52						
2. Lubricants	Total	piece	2.00		109,209,785	122,133,997	134,040,008	137,972,200	137,972,200	641,328,189
	MSM	piece		138						
	FSW	piece		300						
	MSW	piece		300						
	Prisoner	piece		26						
3. Needle & syringes	PWID	set	7.50	44	7,979,400	9,309,300	10,639,200	11,969,100	11,969,100	51,866,100
4. MMT	PWID	visit	10	365	10,928,287	12,856,808	14,785,330	17,356,691	19,285,213	75,212,329
5. STI screening	All target populations	case	210		72,335,746	86,820,017	101,304,289	107,009,036	113,163,164	480,632,252
6. STI diagnosis and treatment	All target populations	case	500		17,888,886	21,763,275	25,637,665	26,858,722	28,258,105	120,406,653
7. HIV tests	All target populations	test	150		111,306,842	143,009,648	163,858,132	184,234,679	201,630,413	804,039,713
Grand total					466,688,684	549,358,905	618,983,305	659,830,169	687,473,802	2,982,334,865

Table 5.5: Cost of service system strengthening, 2015-2019 (THB)

	Strengthen service system	Fiscal year 2015	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019
1	**Branding services**	6,458,400	15,351,400	24,980,400	20,079,940	24,355,400
1.1	Develop common goal, conceptualize and SOP for branding services	1,040,000	3,125,000	6,245,000	5,670,000	5,670,000
1.2	Conduct assessment as inputs to develop strengthen quality of service interventions	84,500	547,500	1,308,500	765,240	1,308,500
1.3	Refine HIV counselling and testing curriculum including support mechanism and training	4,516,000	5,877,600	11,680,000	7,838,400	11,680,000
1.4	Refresh SOP for laboratories and training	60,200	2,155,400	2,215,600	2,155,400	2,215,600
1.5	Develop enhanced STI screening, diagnosis and treatment procedures and roll out training	94,000	1,245,200	1,188,400	1,245,200	1,188,400
1.6	Scale up gender sensitivity curriculum as part of heath care provider training	63,800	1,815,800	1,703,000	1,815,800	1,703,000
1.7	Develop pharmacy networks to support HIV prevention and care	447,500	482,500	487,500	487,500	487,500
1.8	Develop on-line learning portal for health care providers	152,400	102,400	152,400	102,400	102,400
2	**Decentralize services to sub-district hospitals**	2,263,500	9,897,700	16,624,680	15,320,280	16,655,360
2.1	Develop curriculum for health care providers at sub-district hospitals	919,800	-	519,800	-	119,800
2.2	Establish regional partnership and supporting committee including government, civil society, academia to oversight and guide direction of services	-	578,600	239,200	578,600	239,200

	Strengthen service system	Fiscal year 2015	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019
2.3	Establish provincial partnership and supporting committee including government, civil society, academia for programme oversight	-	1,084,000	856,800	1,940,800	856,800
2.4	Training health care providers from sub-district hospitals including supervision and mentorship	1,254,500	8,235,100	12,276,600	10,068,600	12,276,600
2.5	Conduct quality assessment and assurance among sub-district hospitals	89,200	-	2,732,280	2,732,280	3,162,960
3	**Community system strengthening**	32,418,600	19,591,100	32,290,600	19,736,100	34,023,360
3.1	Develop curriculum for CSO to implement RRTTR	13,528,200	7,041,200	13,528,200	7,041,200	13,528,200
3.2	Develop SOP for community led HCT services	200,000	1,253,180	421,540	1,428,320	1,397,320
3.3	Refresh CSO and CBO capacity on treatment literacy, adherence support in the context of test and treat approach	15,402,400	7,804,720	15,352,860	7,774,580	15,328,640
3.4	Develop curriculum on KAP- PLHIV case management for CSOs	3,288,000	3,492,000	2,988,000	3,492,000	3,769,200
	Grand Total	41,140,500	44,840,200	73,895,680	55,136,320	75,034,120

Table 5.6: Cost of creating enable environment, 2015-2019 (THB)

	Create enabling environment	Fiscal year 2015	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019
1	Public communication	**960,000**	**50,600,000**	**51,517,000**	**56,421,000**	**51,717,000**
1.1	Establish mechanism for public communication/mass media and develop national agreed message/content	960,000	600,000	896,000	5,600,000	896,000
1.2	Develop content, communication strategy and launching	-	50,000,000	50,000,000	50,000,000	50,000,000
1.3	Develop public-private partnership	-	-	621,000	821,000	821,000
2	Normalize of HIV and HIV testing	**5,928,700**	**6,565,300**	**5,554,700**	**5,211,800**	**6,128,600**
2.1	Undertake stigma and discrimination survey in health care setting and PLHIV and use data for developing stigma and discrimination reduction intervention	5,861,200	5,861,200	5,444,600	5,000,000	5,444,600
2.2	Develop and implement S&D reduction in education sector	46,500	439,200	54,000	100,500	439,200

	Create enabling environment	Fiscal year 2015	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019
2.3	Scale up law enforcement training	21,000	264,900	56,100	111,300	244,800
3	Promote Code of Conduct for HIV at workplace	**3,311,600**	**4,571,000**	**1,897,600**	**5,757,000**	**5,583,600**
3.1	Implement AIDS Standard Operation at private sector	3,093,000	1,569,200	1,779,000	5,255,200	2,965,000
3.2	Implement AIDS Standard Operation at public sector	218,600	3,001,800	118,600	501,800	2,618,600
4	Empower KAPS on rights protection	**1,113,800**	**2,304,400**	**2,708,100**	**3,287,400**	**3,691,100**
4.1	Train PLHIV and KAP trainers on AIDS and human rights	812,100	1,391,400	1,795,100	2,374,400	2,778,100
4.2	Conduct training on human rights to PLHIV and KAPs	301,700	913,000	913,000	913,000	913,000
5	Strengthen right protection mechanism	**2,211,150**	**2,499,050**	**2,989,050**	**4,009,450**	**4,499,450**
5.1	Support function of national human right protection committee	611,550	611,550	611,550	611,550	611,550
5.2	Develop and scale up provincial human right protection committee	938,200	1,400,200	1,796,200	2,060,200	2,456,200
5.3	Crisis response mechanism	661,400	487,300	581,300	1,337,700	1,431,700
6	Revision of outdated and stigmatizing legislation	**963,200**	**94,500**	-	-	-
6.1	Harm reduction	963,200	94,500	-	-	-
7	Surveillance on laws and policies as well as medias which may impede the HIV programme or promote AIDS rights	**226,000**	**226,000**	**226,000**	**226,000**	**226,000**
	Total	14,714,450	66,860,250	64,892,450	74,912,650	71,845,750

Table 5.7: Estimated resource needs for strategic information and monitoring and evaluation, 2015-2019 (THB)

Com-ponent	Key M&E activity by component	Fiscal year 2015	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019
People, partnerships and planning		14,668,980	13,578,189	13,333,089	13,333,089	13,333,089
1	Organizational structures with HIV M&E functions	13,728,780	12,637,989	12,637,989	12,637,989	12,637,989
2	Human capacity for HIV M&E and new M&E framework for ending AIDS	840,200	840,200	595,100	595,100	595,100
3	Partnerships to plan, coordinate, and manage the HIV M&E system	Integrate with regular activities				
4 and 5	National multi-sectoral HIV M&E plan and costed workplan	Integrate with regular activities				
6	Advocacy, communications, and culture for HIV M&E	100,000	100,000	100,000	100,000	100,000
Collecting, verifying, and analyzing data		78,409,280	73,790,848	65,831,958	64,255,788	65,282,703
7	Routine HIV programme monitoring	33,971,838	32,148,238	30,314,128	30,314,128	30,314,128
8	Surveys and surveillance	33,533,272	34,231,080	27,050,000	25,840,000	27,050,000
9	National and sub-national HIV databases	6,708,000	4,250,000	5,004,000	5,004,000	5,004,000
10	Supportive supervision and data auditing	4,196,170	3,161,530	3,463,830	3,097,660	2,914,575
Evaluation and research		16,510,000	18,179,680	7,100,000	4,050,000	6,100,000
11	HIV evaluation and research	16,510,000	18,179,680	7,100,000	4,050,000	6,100,000
Data use and dissemination		12,566,380	12,566,380	13,773,380	16,293,399	17,690,399
12	Data dissemination and use	12,566,380	13,773,380	16,293,399	17,690,399	16,293,399
	Total	122,154,640	119,322,097	102,558,445	99,329,275	101,009,190

Annex 6: A name list of working groups on National Operational Plan to End AIDS in Thailand for 2015-2019

MSM-TG

Monthinee Wasantiupapokakarn
Piyathida Samutprapoot
Danai Linjongrat
Rapeepun Jommaroeng
Thitiyanun Nakpoh
Supattra Chookiat
Nittaya Phanuphak
Chomanad Manopaiboon
Farida Langkafa
Sirote Jittjang
Panus Rattakijwijarn na nakorn
Suwanee Maisuwan
Narumol Yenyasan
Somchai Phromsombat
Srisumarn Satsara
Jaruwaree Sanidwongse na ayuthaya
Pitchapan Pongsakul

FSW

Angkana Charoenwatachokechai
Ladda Jirawattanapaet
Salee Rattanachote
Surang Janyam
Chamrong Pangnongyang
Thamneub Sangwanprakaisang
Wipada Maharattanavirote
Chanadda Leenuwongphan
Chollada Nuntavisai

Prisoner

Sukanya Phoopat
Kreauthip Chantarataniwat
Prin Wisawakam
Monsicha Poonsawat

PWID

Veraphan Ngamme
Piyabutr Nacapew
Sakda Phoeugchai
Lawan Sarovat
Sairat Noknoi
Yaowaluk Jittrakote
Supot Tangserisap
Thongphit Phinyosinwat
Kritsadakorn Sothong
Yaowares Nakayothinsakul
Chamreang Ruengmak
Chuanphit Choomwattana
Narumol Kamolwatin
Praphasi Kaiyanun
Kessuda Homwong
Wasna Nimworaphan
Chittra Onnom

Migrant

Promboon Phanichpakdi
Thongphit Pinyosinwat
Chutarat Wongsuwan
Kullapussorn Kladngam
Poramin Tangopaswilaisakul

Partners of PLHIV

Lisa Kantamala
Prashyanee Moenyam
Chaweewan Tonpudsa
Suchada Muktia
Benjamas Baipluthong
Bongkot Chatesuwan
Apiwat Kwangkaew
Aree Kumpitak

Kosol Choenchomsakulchai

Ubolrat Thanarujikorn

Health services	Enabling environment	Strategic information and M&E	Technical support	Core team
Cheewanan Lertpiriyasuwat	Supattra Nacapew	Patchara Benjarattanaporn	Tatiana Shoumillina	Petchsri Sirinirund
Thanarat Imsuwansri	Pawana Wienrawee	Porntip Kemngern	Bhassorn Limanond	Taweesap Siriprapasiri
Porntip Yuktanont	Apiwat Kwangkaew	Pensri Charoenyingsawat	Suwat Chariyalertsak	Sumet Ongwandee
Lisa Kantamala	Jarunee Siriphan	Punnee Chaiposri		Patchara Benjarattanaporn
Parichart Chancharas	Jiraporn Siriplang			Mukta Sharma
Suraphon Kaoraenudom	Sompong Charoensuk			Shanti Noriaga
Sorakij Bhakheesheep				Somchai Sriplienjun
Narisa Muntangkool				Nittaya Srikerd
Achara Teeraratkul				Niparuedee Pinyachirapat
Akejitra Sukkul				
Rangsima Lohlekha				
Apiwat Kwangkaew				
Aree Khumpitak				
Porntip Kemngern				
Patranee Phuwaprapakorn				