Chapter 8

Monitoring and Evaluation of PrEP Services

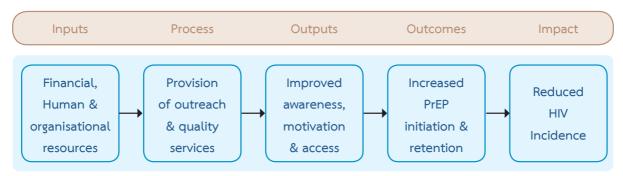
Since the initial pilot projects, Thailand's policy to provide PrEP services is expanding to become a national program. A key milestone in this process was the advocacy to include PrEP as part of the benefits package of the universal health coverage (UHC) scheme. The national roll-out of PrEP will provide the most definitive evidence of the benefit of this intervention for the population at large. This will also give a more complete view of whether implementation goes according to the plans and projections, and what the problems, obstacles, gaps, and other conditions of operations are that either facilitate or hinder services and coverage. Therefore, monitoring and evaluation (M&E) are required. The results of monitoring progress, operations, and assessments need to be used to improve operations to achieve the goals.

8.1 Framework for M&E of PrEP Services in Thailand

The Department of Disease Control and the National Health Security Office (NHSO), including network partners who are represented on the national task force with experts from the UNAIDS-funded Center for Evaluation, London School of Hygiene and Tropical Medicine, has developed a framework for M&E of the country's PrEP program, providing PrEP services at the front lines, and advocating PrEP implementation at all levels. This framework calls for the systematic and continuous monitoring of the progress of operations. The results can be used to improve the cost-effectiveness of services throughout the country. Such a system will help every PrEP service unit in the country to gather performance data using the same standards to monitor progress and evaluate outcomes for the improvement of strategic planning. That way, PrEP services can be steered toward the areas of most need, and fill gaps in operations.

Emphasis of the M&E framework

The long-term goal of the PrEP M&E framework is a decrease in new HIV infections. It takes time to



monitor and apply national surveillance and trend analysis data. The information contained in the above framework may not directly correlate with the outcomes, but it helps to visualize what the expectation is for achieving impact.

Table 8.1 Tools for M&E of the PrEP program in Thailand

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Inputs and Process	Outputs	Outcomes	Impact (long-term)		

.1 Develop service guidelines/procedures	The target population is more aware of	More members of the target population	Reduced incidence of HIV infection
.2Conduct training	PrEP use.	receive HIV testing	
.3Supervise	2. The target population is more motivated	Increased frequency of HIV testing	
.4Promote PrEP for key populations by	to reduce risk of HIV infection with PrEP	PrEP initiation increased in those at high	
community outreach and marketing	3. There is better access to PrEP services:	risk of HIV infection	
.5Provide HIV VCT	both actual and perceived	Clients use PrEP in accordance with	
.6Integrate PrEP into existing services	Advise eligible clients to use PrEP	national guidelines.	
.7Provide referral	5. Encourage PrEP users to follow up on	People at high risk of HIV continue to	
.8Create a database system for tracking	their appointments	take PrEP as prescribed	
		Long-term follow-up for both risk behavior	
		and STIs in the PrEP group and those who	
		stopped using PrEP	
M&E Indicators	M&E Indicators	M&E Indicators	M&E Indicators
1. Degree to which operations are going	Number of outreach visits	Number of people using each service	1. HIV incidence
Degree to which operations are going according to the plan	Number of outreach visits We of target population reached by peer	Number of people using each service Number of people tested for HIV	HIV incidence Change in individual PrEP user HIV test
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according to the plan	2. % of target population reached by peer	Number of people tested for HIV	2. Change in individual PrEP user HIV test
according to the plan 2. % of personnel still working each year	% of target population reached by peer educators	Number of people tested for HIV Number of people starting PrEP	2. Change in individual PrEP user HIV test results
according to the plan 2. % of personnel still working each year 3. Number of training sessions conducted	% of target population reached by peer educators 3. % attitude toward PrEP in the general	Number of people tested for HIV Number of people starting PrEP PrEP regiment adherence rate	2. Change in individual PrEP user HIV test results
according to the plan 2. % of personnel still working each year 3. Number of training sessions conducted 4. % of personnel trained	% of target population reached by peer educators 3. % attitude toward PrEP in the general community	Number of people tested for HIV Number of people starting PrEP PrEP regiment adherence rate % of PrEP users who remained at high	2. Change in individual PrEP user HIV test results
according to the plan 2. % of personnel still working each year 3. Number of training sessions conducted 4. % of personnel trained 5. Degree to which the database is	% of target population reached by peer educators 3. % attitude toward PrEP in the general community 4. % of target population receiving	2. Number of people tested for HIV 3. Number of people starting PrEP 4. PrEP regiment adherence rate 5. % of PrEP users who remained at high risk and continued PrEP at 3, 6, 9, 12	2. Change in individual PrEP user HIV test results
according to the plan 2. % of personnel still working each year 3. Number of training sessions conducted 4. % of personnel trained 5. Degree to which the database is working in each area	% of target population reached by peer educators 3. % attitude toward PrEP in the general community 4. % of target population receiving	Number of people tested for HIV Number of people starting PrEP PrEP regiment adherence rate for PrEP users who remained at high risk and continued PrEP at 3, 6, 9, 12 months after PrEP started	2. Change in individual PrEP user HIV test results
according to the plan 2. % of personnel still working each year 3. Number of training sessions conducted 4. % of personnel trained 5. Degree to which the database is working in each area 6. Acceptable service quality based on	% of target population reached by peer educators 3. % attitude toward PrEP in the general community 4. % of target population receiving	2. Number of people tested for HIV 3. Number of people starting PrEP 4. PrEP regiment adherence rate 5. % of PrEP users who remained at high risk and continued PrEP at 3, 6, 9, 12 months after PrEP started 6. Reasons for stopping PrEP	2. Change in individual PrEP user HIV test results

Framework-based assessment questions at each level are as follows:

Inputs:

- How many resources are used to provide PrEP?
- Has there been investment in personnel, finance, and other resources for each component?
- Is the management and allocation of resources appropriate or not? For example, do the personnel have knowledge and ability to do the work, and is there sufficient budget and materials, etc.?

Process:

- Is the activity being implemented as designed or not?
- Does the service cover all components according to the guidelines and procedures set forth?
- Is the operation in accordance with the planned period? Are there any unexpected delays?
- What external factors (policies, health systems, socio-economic context) are affecting implementation? What are the impacts of these on operations?

Outputs:

- How comprehensive is the implementation of activities across each measure (both in terms of the overall picture and in each target population)?
- Is the activity feasible from the perspective of the plan, and is it acceptable from the perspective of the target population?
- How intense is implementation, e.g., what is the frequency of outreach services? What is the volume of various activities, and how much time is devoted to counseling?
- What is the level of performance against the quality targets (i.e., in terms of standard technical quality and quality from the perspective of the client, e.g., client-friendly service)?
- Does the target population have adequate awareness and motivation to use PrEP?
- · Has the target population been advised to use PrEP, and was the offer was accepted?

Outcomes:

- What is the number of PrEP acceptors from the target population, and is the trend upward?
- Has the use of PrEP increased in populations at high risk of HIV infection?
- Do people at high risk of HIV continue to use PrEP as directed, and each time after PrEP is started?

• What is the level of condom use among continuing PrEP users, PrEP stoppers, and PrEP opt-outs?

8.2 Indicators according to the Thai PrEP Cascade

The Thai PrEP Cascade is a tool that integrates services and service metrics. The Cascade is one way of presenting the information collected in accordance with the M&E framework. The Cascade provides information over a period of twelve months. There is a set of indicators used as a framework to monitor the progress of a country's PrEP operations. The first indicator is the initial number of persons testing negative for HIV. Next, there is a calculation of the proportion of those persons who are eligible and who initiate PrEP. Once the target population starts PrEP, the next indicators are the proportion of those who continue PrEP at one, three, six, and twelve months. This Cascade should reveal gaps in each step of the service and make it possible to better understand the operational situation.

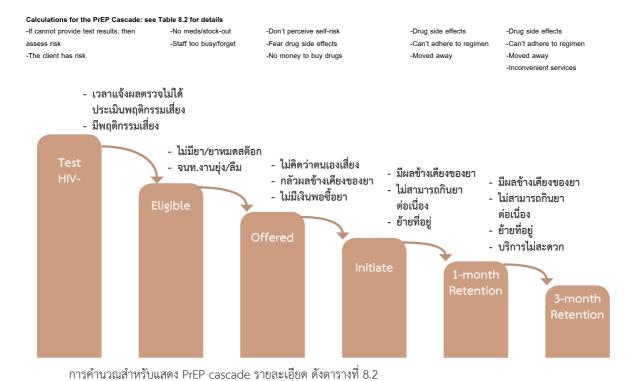


Table 8.2 Definitions and steps in the Thai PrEP Cascade used for monitoring implementation

	Step	Definition	Measurement
1.	Test for HIV	Number of people accessing HIV testing services (starting at 100% in the Cascade)	Number of people who have had at least one HIV test during the program period
2.	HIV test is negative	Number and percent (of the number in Step 1) testing negative	Numerator: Number of people who tested negative for HIV Denominator: Number of people who first tested for HIV in the reporting year
3.	Eligible for PrEP (see Table 3.2)	Number and percent testing negative eligible for PrEP	Numerator: Number of people who tested negative for HIV eligible for PrEP Denominator: Number of people who tested negative for HIV
4.	Pre-PrEP counseling	Number and percent of PrEP eligible candidates who receive counseling	Numerator: Number of people who are advised to use PrEP. Denominator: Number of people who are eligible for PrEP
5.	Initiate PrEP	Number and percent of PrEP counseling clients who accept PrEP	Numerator: Number starting PrEP Denominator: Number advised to use PrEP
6.	Use PrEP continuously for one month	Number and percent initiate PrEP use continuously for one month	Numerator: Number using PrEP continuously for one month. Denominator: Number started using PrEP
7.	Use PrEP continuously for three months	Number and percent initiate PrEP use continuously three months	Numerator: Number using PrEP continuously for three months Denominator: Number started using PrEP

For the global monitoring framework for PrEP services, UNAIDS has established key indicators for monitoring PrEP operations in many countries. In order to work, the monitoring system requires countries to report on national progress toward ending AIDS (Global AIDS Monitoring report, GAM report), including the number of key populations who received PrEP during the reporting period. Thailand has the same monitoring framework under its Global Fund program, with operational activities and indicators that match the global tracking system. In addition, WHO has recommended

a minimal set of baseline PrEP indicators for service units. The following four key indicators, adapted to the Thai context, are part of the database of the Thai PrEP Cascade:

- 1. Indicator of PrEP use (PrEP Uptake): percent of people who test negative for HIV, are eligible for PrEP, and began PrEP within twelve months;
- 2. Indicator of continued PrEP use in the initial period: percent of people who use PrEP continuously for the first three months;
- 3. Indicator of prevalence of PrEP use with severe anti-HIV toxic effects: percent of those who started PrEP who had to stop taking PrEP because of severe anti-HIV toxic effects in the past twelve months; and
- 4. Indicator of a breakthrough infection among PrEP users: percent of PrEP users in the past twelve months who had at least one positive HIV test.

8.3 Roles and duties in monitoring and evaluation at each level

All levels need to play a role in monitoring operations, especially the point-of-service level, and on a regular basis. Overall evaluation of the PrEP program may be necessary only at the national level.

National

The Division of AIDS and STIs, as the central body that oversees Thai HIV programs and policies, encourages service providers to promote PrEP with their catchment population. In order to inform policy and program management, the Division of AIDS and STIs has defined the following framework of key national indicators for PrEP:

- Percentage of key populations who received PrEP during the reporting period, and reported quarterly in accordance with the PrEP Cascade, including:

Estimated number of key population groups that need PrEP

Number and percent of key populations eligible for PrEP

Percent of people eligible for PrEP who were recommended to receive PrEP Number and percent of people advised to use PrEP and have started using it

Number and percent of people who used PrEP continuously for one month

Number and percent of people who started PrEP and used it continuously for three months

Number and percent of people who started PrEP and used it continuously for six months

Number and percent of people starting PrEP and used it continuously for twelve months

- These data are categorized by region/zone and by target population. That disaggregation of the data can provide insights into where the PrEP program is working well, and where it is deficient. Thereafter, the program can conduct more in-depth studies of the factors and conditions that directly influence performance. The information on the performance monitoring metrics will also be used as part of the overall evaluation.

District level and provincial level

The network of Disease Prevention and Control Offices #1-12, the Urban Institutes for Disease Prevention and Control, and the Provincial Health Offices (PHO) monitor PrEP operations at the provincial and district level, and report data on the following indicators on a quarterly basis:

- Percentage of key populations who received PrEP during the reporting period, and reported quarterly in accordance with the PrEP Cascade:

Number of people who have access to provincial HIV testing services

Number and percent of people tested negative for HIV

Number and percent of people who tested negative for HIV who are eligible to receive PrEP

Percent of people eligible for PrEP who were offered/recommended to receive PrEP

Number and percent of people who have been advised to use PrEP who started using PrEP

Number and percent of people starting to use PrEP and used it continuously for one month

Number and percent of people starting to use PrEP and used it continuously for three months

- Data are then categorized by province and target population

Service level

Service agencies need to regularly monitor their PrEP services in order to track progress and see where implementation needs to be improved. At the local level, more information is required than at the provincial and district level. The following are the indicators according to the PrEP Cascade at the point-of-service level:

- Percentage of key populations who received PrEP during the report period, and reported monthly:

Number of people who have access to HIV testing services

Number and percent of people who tested negative for HIV

Number and percent of people who tested negative for HIV who are eligible to receive PrEP

Percent of people eligible for PrEP and were recommended to receive PrEP

Number and percent of people who have been advised to use PrEP who started using it

Number and percent of people starting to use PrEP and used it continuously for one month

Number and percent of people starting to use PrEP and who used it continuously for three months

- These data are analyzed by service unit, target population, age group, new/continuing acceptors, the type of PrEP intake (Daily, On-demand), persons who did not meet the PrEP criteria for any reason, condom use, and the occurrence of a HIV+ blood test while on PrEP.

8.4 Sources of data for monitoring implementation and recording data

Thailand has a policy to use data from the NAP Plus program as the main database to monitor the country's PrEP implementation. The guidelines for data entry are clear for all service units, in both the government and CSOs who provide PrEP. Service providers who were part of past special programs or pilot sites may have had different reporting systems and indicators. Thus, in order to conform to national policy, all those providers need to switch to the NAP Plus program format so that there is a consistent picture of implementation and outcomes. Using a single, standardized reporting system

also reduces the burden on service providers so they don't have to keep multiple sets of the same data. This reduces the duplication of data, and creates a quality information system.



8.5 Guidelines for recording data in the NAP Plus system

Service units which are to record data on PrEP services into the national database system need to register as a PrEP service unit. They then receive a unique code which links their data with reports to the NHSO.

The following are guidelines for recording data into the national database:

- 1. The service unit registers as a PrEP provider with the NAP Plus system (National AIDS Program Plus) at http://dmis.nhso.go.th/NAPPLUS/login.jsp under the heading "Providing PrEP".
- 2. Data recording process and information to be recorded
 - 2.1 Save general information of the client
 - Funding sources that support medicines
 - · Target groups receiving PrEP services
 - 2.2 Risk assessment:
 - Risk criteria for receiving PrEP services (last six months)
 - Ever taken PrEP before? Record history of past PrEP, and specify last date of taking the drug
 - · Evaluation of service eligibility
 - 2.3 Counseling (PrEP counseling/recommending PrEP intake)
 - 2.4 Decision to take PrEP
 - · Laboratory tests before starting PrEP
 - · Basic information and service history
 - · Side effects from drug use
 - · Risk behavior in the past three months.
 - STIs
 - · Side effects of the drug
 - · Receiving condoms and water-based lubricant
 - PrEP dosage regimen
 - · Discontinuation of medication

Next appointment

More details on the procedure for recording data and information that must be recorded in the NAP Plus system can be found in Appendix G.