

# **Control and Prevention of Tuberculosis**

## **Thailand Country Narrative** **Family Health International (FHI 360)**

**FY2015**  
**Semi-Annual Performance Report**  
**(October 1, 2013 – March 31, 2014)**



## Table of Contents

Acronyms .....	3
Narrative I: Executive Summary .....	4
Narrative II: Program performance/achievements and key challenges encountered during reporting period by thematic area .....	4
A. MDR-TB Prevention .....	4
B. MDR-TB Management .....	5
C. Strategic Information.....	9
D. Monitoring and Evaluation.....	10
E. Enabling environment for MDR-TB control and prevention.....	10
F. Capacity building and technical assistance.....	11
Annex I: Method used to estimate total number of individuals reached and adjustment factor to calculate for potential overlap among different partners and other USG (Narrative) .	11
Annex II: Processes carried out to ensure data quality .....	11
Annex III: Summary of accomplishments against the work plan and targets (see separate Excel sheet) .....	11

## Acronyms

BTB	Bureau of Tuberculosis (Thailand)
CAP-TB	Control and Prevention of Tuberculosis (Greater Mekong Sub-region Multidrug Resistant Tuberculosis Prevention and Management Project)
DOT	Directly Observed Therapy
FHI 360	Family Health International
FY	Fiscal year
IA	Implementing Agency
MDR-TB	Multidrug resistant tuberculosis
NTP	National TB Control Program
PHO	Provincial Health Office
PMDT	Programmatic Management of Drug-resistant TB
SHPH	Sub-district Health Promotion Hospital
TA	Technical assistance
TB	Tuberculosis
USAID	United States Agency for International Development
VHV	Village Health Volunteer

## **Narrative I: Executive Summary**

The CAP-TB Thailand program has continued to strengthen technical capacity on multi-drug resistant tuberculosis (MDR-TB) for the project's partners in Rayong. Some activities for this reporting period are a continuation of technical support from the previous fiscal year (FY), while the project has also scaled up technical support to a new project site.

In Rayong, CAP-TB has engaged Ta Pong and Yai Da sub-district health promotion hospitals (SHPHs) in Ta Pong Sub-district (Muang District), to implement a community model for programmatic management of drug resistance tuberculosis (PMDT). Activities were targeted to equip selected village health volunteers (VHVs) with the knowledge and skills to support TB/MDR-TB patients. The project continued to strengthen the technical capacity of Rayong's multidisciplinary team and the wider TB network for MDR-TB management. This has primarily been done through regular case conferences; through a workflow analysis of DOT provision for MDR-TB patients; and through training on provider-patient communication. The TB network strengthening model implemented in Rayong has now been replicated to Kanchanaburi Province, at the request of the Ministry of Public Health Department of Disease Control.

## **Narrative II: Program performance/achievements and key challenges encountered during reporting period by thematic area**

### **A. MDR-TB Prevention**

#### **Output 1.1: Mobilized communities to advocate for and use TB services**

##### **Activity 1.1.1 Organize one-week event to commemorate World TB Day**

During the reporting period, Klaeng Hospital, Klaeng District Health Office, and the Foundation for AIDS Rights (FAR) organized campaign activities on 24 March 2015 to disseminate knowledge about TB and health related issues. The event was organized at Klong Thom flea market. Approximately 200 people (120 Thais, 40 females and 80 males; and 80 migrants, 30 females and 50 males – *CAP-TB indicator2/USAID PMP indicator 9*) participated in the activities. Health care providers from Klaeng Hospital and representatives from Klaeng District Health Office contributed their expertise on TB. The FAR team organized games and quizzes on TB knowledge, and TB screening was also conducted among migrant workers.

Muang, Ban Khai and Mabtapud will organize community activities to promote TB prevention in April. Rayong Hospital, Rayong City District Health Office and Ta Pong Tambol Administration Organization (TAO) will organize events from 28-30 April 2015 to promote health and disease prevention as well as to screen for potential TB patients among approximately 620 individuals aged 35 years and above who live in Ta Pong and Yai Da sub-districts. Other activities will include health check-up; knowledge dissemination; and games and quizzes on TB, diabetes, high blood pressure, dengue, HIV/AIDS and sexually transmitted diseases. Ban Khai District Health Office and Ban Khai Hospital will organize training on TB screening for VHVs (one from each sub-district) to equip them for identifying presumptive TB patients in their village or community. The HRH Princess Sirindhorn Chalerm Phra Kiat Rayong Hospital (formally Mabtapud Hospital) will conduct TB education sessions for patients in hospital waiting areas and will organize exhibition boards at the ARV Clinic.

#### **Output 1.2: Scale-up implementation of TB infection control in health facilities/households**

##### **Activity 1.2.1: Implementation of Infection Control (IC) guidelines in hospitals and households**

CAP-TB in collaboration with Rayong Provincial Health Office (PHO) and Rayong Hospital's Infection Control nurse introduced *The Practical Guide: Tuberculosis Infection Control in Public Health Units, Congregate Settings, Communities and Households in Rayong* and corresponding checklists on 19 November 2014. A total of 21 participants (all females) attended the meeting, with representation from Rayong PHO,

registered nurses and public health officers (professional level) from nine public provincial and community hospitals. These hospitals were: Rayong, Klaeng, Ban Chang, Ban Khai, Pluak Daeng, Wang Chan and Khao Chamao, Ta Pong and Yai Da sub-district health promotion hospitals (SHPHs), Mongkut Rayong Hospital, Rayong Central Prison and CAP-TB Thailand Program staff.

The participants reviewed and revised the TB IC guide based on their work experience to improve the practical utilization of the document. The participants agreed that all hospitals, especially the six key partner hospitals namely Rayong, Klaeng, Ban Khai, Mabtapud and Ta Pong and Yai Da SHPHs will use the TB IC checklist for health facilities to assess their own practice. The TB IC checklist for households will also be used to assess TB IC practice at the household and community level.

The TB IC assessment team, which comprises representatives from Rayong PHO and Rayong Hospital, will conduct quarterly monitoring visits to these six hospitals and to patient households to assess TB IC practices according to the guidance and checklists. The monitoring visits will inform if further actions are needed to improve IC practice in Rayong.

### **Output 1.3: Strengthened TB/HIV integration**

#### **Activity 1.3.1: Integration of TB and HIV activities**

The first discussion regarding TB/HIV integration in Rayong Hospital was introduced by the Deputy Director General of the Department of Disease Control, Mr Somsak Akksilp (MD) with Rayong Hospital Director and concerned personnel in March 2014. Following the initial meeting, TB and ARV clinics of Rayong Hospital organized an internal meeting to analyze patient flow of each clinic and identify the roles of health care providers at each service point.

After these meetings, it was summarized that the ARV Clinic screens for potential TB patients among HIV infected patients and only refers AFB smear positive patients to the TB Clinic for TB treatment. In addition to HIV infected patients who are AFB smear positive, the TB Clinic also treats patients who have been lost to follow-up as well as retreatment patient, both smear positive and negative, as well as TB patients with complications. As for TB patients with HIV co-infection, the patients will be treated for TB as well as initiated on ARV at the TB Clinic and will be referred to the ARV Clinic for further treatment after they have completed their TB treatment.

The CAP-TB project will continue to coordinate with concerned personnel from both TB and ARV clinics to identify any needs for support on workflow analysis. Potential strategies and interventions will also be considered to further strengthen the integration of services between both clinics.

## **B. MDR-TB Management**

### **Output 2.1: Ensured capacity, availability, and quality of laboratory testing to support the diagnosis and monitoring of TB patients, including the rapid diagnosis of MDR-TB**

#### **Activity 2.1.1 Strengthen hospital laboratory's capacity in TB diagnosis**

The Senior Laboratory Specialist and Laboratory Specialist of FHI 360 Asia Pacific Regional Office (APRO) conducted initial laboratory assessment visits to the four primary hospitals (Rayong, Klaeng, Ban Khai and Mabtapud) from 3-4 November 2014.

This initial assessment was aimed to assess laboratory practice for TB and MDR-TB diagnosis in accordance with Laboratory Accreditation (LA) standards and to assess the need for technical support to strengthen TB and MDR-TB diagnosis. The assessment team used the LA checklists to comply with the Thailand Medical Technology Standard 2012.

1. General recommendations from the assessment included the following: The lab staff need to regularly update relevant documents; recorded results and use of correct recording forms and proper correction of data should be monitored; equipment maintenance should be recorded regularly; timely calibration and regular testing of equipment are required; completion of work instructions at work stations, strict compliance to laboratory guidelines and policies, and regular internal audit, proper facilities and environmental management should be enforced.
2. There were some specific recommendations provided, including the need to check and calibrate the refrigerator temperatures; and the improper use of expired reagents.
3. In addition to the initial laboratory assessment, CAP-TB coordinated with the laboratory specialists of FHI 360 APRO and proposed TB laboratory diagnosis key performance (KPI) to the project partners. These indicators include external quality assurance (EQA), organization and personnel, standard operating practice (SOP), equipment, test and control, record and report and safety. The CAP-TB project will continue to work with Rayong PHO, partner hospitals and FHI 360 APRO laboratory specialists to follow up on the recommendations from the initial assessment and the proposed indicators, and to provide technical support to the laboratories at the four hospitals as needed.

During the reporting period, 100 persons were tested for MDR-TB using the GeneXpert. Among these, 14 patients (10 new cases, 4 retreatment cases) – **CAP-TB indicator 9/USAID PMP indicator 7**) were Rifampicin resistant. In addition to these 14 patients diagnosed using GeneXpert, 7 patients (all retreatment cases) were diagnosed with MDR-TB using conventional DST.

## **Output 2.2: Strengthened case-finding and referrals for MDR-TB**

### **Activity 2.2.1 Strengthen referral system for MDR-TB**

*Conduct supervision visits to sub-district health promotion hospitals (SHPHs) in Muang District and in Ta Pong and Yai Da sub-districts to monitor and provide necessary support to strengthen patient referral system*

The Committee on Sustainable TB Prevention and Control in Ta Pong Sub-district has been formed to monitor and provide necessary support to patient referrals. Rayong PHO in collaboration with Rayong Hospital and Muang District Health Office will conduct supervision visits to Ta Pong and Yai Da SHPHs to improve the referral system in May-June 2015.

Another important activity in strengthening MDR-TB patient referrals is the training and capacity building of village health volunteers (VHVs) in Ta Pong and Yai Da sub-districts so that they can augment the role of health care providers in supporting MDR-TB patients in the area. During the reporting period, Rayong PHO, in collaboration with a team from Rayong Hospital, conducted activities to build capacity of the VHVs in Ta Pong and Yai Da sub-districts (*See activity 2.4.1*).

*Monitor referrals made to Klaeng, Ban Khai and Mabtapud hospitals and conduct home visits in collaboration with Rayong Hospital home visit team to patient homes*

Rayong PHO followed up on patients referred from Rayong Hospital to Klaeng, Ban Khai and Mabtapud hospitals. During the reporting period, a total of 17 patients (two to Klaeng, five to Ban Khai and 10 to Mabtapud) were referred. Of this number, 13 are TB patients, two are MDR-TB patients and two are TB contacts.

Rayong PHO conducted home visits to new MDR-TB patients or patients who have problems with treatment, in collaboration with the home health care team of Rayong Hospital. During the reporting period, Rayong PHO conducted five home visits to six patients, all of whom were new patients.

During the reporting period, 241 patients (219 TB cases, 155 males, 64 females; 16 MDR-TB cases, 15 males, one females; six TB contacts, all females) were referred to the project primary hospitals (Rayong, Klaeng, Ban Khai, Mabtapud, Ta Pong and Yai Da) for TB/MDR-TB related services (**CAP-TB indicator 3**). Of these, 92 patients took up services, which constituted 38% of total referrals (**CAP-TB indicator 13**). Fifty-eight patients

were not reported to take up services, thus it is unknown whether they are underreported or lost to follow-up. The project will follow up on these missing cases and discuss with the project partners to understand and identify the challenges in referral tracking and reporting such as the confusing reporting forms, lack of coordination and communication between health facilities to follow up with the patients or with each other. If these cases are truly lost to follow-up, this needs to be addressed and patients contacted if possible.

#### *Coordination with Mongkut Rayong Hospital to improve the reporting system and to follow up on patient referrals*

In addition to supervision visits to community hospitals and SHPHs, Rayong PHO coordinated with Mongkut Rayong Hospital, a private hospital in Rayong Province, to improve reporting and follow up on patient referrals between Mongkut Rayong Hospital and community hospitals and SHPHs in the area to ensure continuum of care. Rayong PHO coordinated the transfer of health benefits from Rayong Hospital to Mongkut Rayong Hospital, a significant step to ensure that patients can receive health benefits for TB regardless of their health care facility. The overall goal is to ensure smooth transition and continuum of care.

### **Output 2.3: Strengthened human resource capacity for MDR-TB management**

#### **Activity 2.3.1: Conduct case conference for multi-disciplinary team of Rayong Hospitals and physicians from lower-level health facilities in Rayong**

In FY15, CAP-TB supported Rayong PHO and project partners to conduct bi-monthly case conferences. During the reporting period, Rayong PHO coordinated and invited the broader TB network to three case conferences on 21 October 2014, 23 December 2014 and 12 February 2015. A total of 20 participants (18 females, two males; 16 medical personnel, four public health officers; 19 from public sector and one from private sector – *CAP-TB indicator 15/USAID PMP indicator 18*) attended the conferences. At each conference, Rayong Hospital updated the participants on MDR-TB patients in the province, including the cumulative number of MDR-TB patients to date; laboratory diagnosis results; cumulative number of deceased patients; specific conditions of the patients that require special attention or follow-up; and urgent cases that require immediate follow-up or support. These bi-monthly meetings offer an important opportunity for the network to share and discuss potential solutions to better provide care and support to the patients in Rayong.

During the first six months of FY15, there were 71 MDR-TB patients (56 males, 15 females); 64 (51 males, 13 females) are still alive and seven (five males, two females) have died. Among the 64 patients, 34 patients are between 20-39 years old and 20 (18 males, two females) are still on injection, >30% are co-infected with HIV and > 12% have diabetes mellitus.

#### **Activity 2.3.2: Conduct case conference for TB teams from hospitals under Bangkok Metropolitan Administration in Bangkok**

During the reporting period, CAP-TB supported the Medical Service (MS) Department, Bangkok Metropolitan Administration (BMA) to conduct the first case conference for physicians, nurses and interested personnel from hospitals under BMA. The conference was conducted on 26 November 2014 at the Medical Service Department office building. A total of 48 participants attended (11 males, 37 female; nine physicians, 12 nurses, eight pharmacists, 12 public health officers and seven personnel from MS Department, two drug resistant tuberculosis (DR TB) experts and two CAP-TB project staff – *CAP-TB indicator 15/USAID PMP indicator 18*) from 10 BMA hospitals, Department of Health, BMA, and interested personnel from the MS Department.

The participants discussed two case studies, one pleural tuberculosis case from Charoenkrung Pracharak Hospital and one complicated retreatment TB case from Tak Sin Hospital. The participants discussed potential diagnosis and treatment of each case based on the patient's history and examination results presented by the case presenters. The DR TB experts also participated in the discussion and provided further comments and advice. At the end of the presentation, the presenters concluded their presentations by highlighting key

messages and learning issues for their case. The CAP-TB Chief of Party and CAP-TB Thailand Program Manager, moderated the discussion throughout the conference. The project will continue to coordinate with both the Medical Service and Health departments of BMA for the next case conferences in FY15.

## **Output 2.4: Strengthened community participation in MDR TB prevention and treatment**

### **Activity 2.4.1: Improve the quality of DOT provision**

#### *The analysis of work burden and review of TB/MDR-TB information materials*

On 17-18 December 2014, CAP-TB supported Rayong PHO and the partners to conduct an analysis of the work flow for providing DOT to MDR-TB patients. This meeting was also used to review TB/MDR-TB information materials. Attendees include representatives from partner hospitals, namely Rayong, Klaeng, Ban Khai and Mongkut Rayong as well as Ta Pong and Yai Da SHPH, Rayong Central Prison and Rayong PHO.

The work flow analysis aimed to map out processes of DOT provision to MDR-TB patients, identifying all service providers involved and their roles and responsibilities, identifying service gaps, and identifying areas for improvement of services. Flowcharts were created to capture steps and processes in DOT provided by public health facilities, one private hospital and the Rayong Central Prison. Characteristics of DOT provision at each venue as well as problems and challenges in providing the services were summarized. The roles of the network were summarized, for the following levels: 1) caregivers, including VHVs, family members, employers; 2) local administration at the community level; and 3) Rayong Hospital and PHO at the provincial level. Network coordination at every level was discussed, with the overall goal to maximize continuity of treatment, completion, and cure.

The material review meeting aimed at reviewing existing TB/MDR-TB materials to identify gaps. It was agreed to develop an MDR-TB DOT book, which will be used to track an MDR-TB patient's injection history and record DOT activities. Additional copies of the TB manual for VHVs will also be printed. The manual will be included in the home visit bag. Subsequent to this meeting, it was learned that the BTB is currently developing an MDR-TB DOT book, thus CAP-TB will coordinate with the BTB to avoid duplication.

#### *Capacity building of village health volunteers in Ta Pong and Yai Da sub-districts*

During the reporting period, Rayong PHO in coordination with Rayong Hospital conducted a pre-test to assess TB knowledge among 31 participating VHVs from Ta Pong and Yai Da sub-districts and held small-group discussions on a monthly basis. Topics of discussion include beliefs and perceptions that VHVs have about TB and MDR-TB patients, knowledge about TB, empowering communication and patient confidentiality. From October 2014 to March 2015, three small-group discussions were held for Ta Pong and Yai Da VHVs. The first meeting took place on 14 November 2014 to discuss VHV beliefs and perceptions of TB; the second on 16 December 2014 to provide TB knowledge to VHVs through video clips and games as well as to discuss empowering communication and patient confidentiality; the third on 2 February 2015 to discuss infection control (IC) in the community, focusing on IC knowledge and practicing how to care for TB patients at home. From these three meetings, 63 (14 are males, 49 are females) participated. Thirty-one of the attendees are VHVs, one is a doctor, one is a pharmacist, seven are nurses, five are public health officers, 13 are public health personnel, three are local administrative officers and two are CAP-TB project officers.

#### *Quarterly monitoring and assessment of health care providers and village health volunteers who provide support to patients in Ta Pong and Yai Da*

During the first six months, Ta Pong and Yai Da VHVs received numerous TB-related trainings through small-group discussions and showed enthusiasm and readiness to make home visits. Rayong Hospital is now preparing home visit bags, which VHVs will use during their home visits. CAP-TB will work closely with

Rayong PHO and concerned staff to monitor and assess VHV performance in making home visits to provide quality DOT accordingly.

#### **Activity 2.4.2: Implement comprehensive PMDT model in Ta Pong and Yai Da communities**

Ta Pong and Yai Da sub-districts were aimed as a pilot for a comprehensive Programmatic Management of Drug-resistant (PMDT) model, from IC in health facilities and households, to referrals of patient/presumptive patients, to quality DOT provision. During the reporting period, a committee and a working group for sustainable TB prevention and control for Ta Pong and Yai Da sub-districts were set up and tasked to provide knowledge for Ta Pong and Yai Da VHVs and select the VHVs who would participate in the program. Thirty-one VHVs from the two communities were selected based on the criteria that they love their community, are responsible, speak their mind, have time to do volunteer work, have experience in making home visits and understand patients.

Rayong PHO in coordination with a team from Rayong Hospital built the capacity of the selected VHVs through small-group discussions on various topics in order to provide TB knowledge as described in Activity 2.4.1.

Moving forward, CAP-TB will hold a session for cured patients and current patients to share their experience and thoughts with DOT provision team, a training on IC in households and communities, and a meeting of the high-level committee to request for a regulation governing use of public space for TB patients and to lay out a referral system in Ta Pong and Yai Da SHPHs jointly with Rayong Hospital interdisciplinary team. In addition, a model for making home visits to TB patients will be developed and further expanded to MDR-TB patients. DOT provision training and knowledge exchange sessions will also be held. Regarding IC in health facilities and households, Ta Pong and Yai Da SHPH implemented TB IC Guide and conducted TB IC self-assessment checklist. The M&E team will continue to monitor and provide appropriate support to the hospitals to improve IC in health facilities and households.

### **C. Strategic Information**

#### **Output 3.1: Strengthened strategic information for health systems**

##### **Activity 3.1.1: Support Bureau of Tuberculosis on the decentralization of MDR-TB expertise**

CAP-TB has supported the BTB in decentralizing MDR-TB expertise to regional and provincial levels through the online help desk. In FY15, the project focused its technical support on system promotion within the BTB network. In October 2014, the BTB notified their network, focusing on 12 offices of disease prevention and control (ODPCs), 77 public health office (PHOs) and Medical Service and Health departments of BMA. The project supported the BTB in developing an introduction information sheet to introduce the system. This information sheet was sent together with the letters. The BTB used the design and content in the information sheet to produce posters to further promote the system.

In addition, the project also supported the BTB on promotion of the system through bi-weekly email newsletters, creating newsletter headings and setting up user groups for the BTB. These newsletters are sent to the BTB network. During January to March 2015, the BTB sent out five newsletters on DR-TB expert introduction; summarizing steps to send out questions into the online help desk; TB culture guidelines; guidelines for sending specimens for MDR-TB diagnosis; and the international standard on TB diagnosis and treatment. During the reporting period, a total of 22 questions from nine provinces, from the northern, northeastern, central and southern regions in Thailand were sent into the online helpdesk seeking for DR-TB expert advice. Most of the questions concerned proper treatment for MDR-TB. The project will continue to work closely with the BTB to provide timely and appropriate support for system management.

##### **Activity 3.1.2: Conduct on-site mentoring to partners on data quality assurance (DQA), to build capacity for data use**

CAP-TB Project, Thailand Program monitored project implementation through monthly project working group meetings. The project working group comprises representatives from Rayong PHO, CAP-TB coordinators from Rayong Hospital and concerned staff. The project works in close collaboration and coordination with Rayong PHO in reviewing referrals of patients reported by the primary hospitals in the project reporting forms. The CAP-TB project staff verified the number of patients referred and coordinated with Rayong PHO for further verification with the reporting hospitals if needed. The project discussed with Rayong PHO and the partner hospitals on an ongoing basis to improve the project reporting forms and to discuss more effective ways to track patient referral and successful referrals.

### **Activity 3.1.3: Review and reorganize patient data collection and record keeping**

Rayong PHO in coordination with Rayong Hospital plans to visit Ta Pong and Yai Da sub-districts at the end of May or early June 2015 to assess the system that Ta Pong and Yai Da SHPHs use for patient data collection and record keeping. A plan to further develop the system to ensure data completeness, accuracy and efficiency will be devised based on the assessment outcomes.

## **D. Monitoring and Evaluation**

The CAP-TB Country Program Manager and Program Officer for the Thailand Program conducted site visits to Rayong Province every month to attend monthly project working group meetings to provide supportive supervision for the implementing agencies (IAs) on project implementation and monitoring.

Rayong PHO coordinated and invited the project working groups to the monthly meeting. During the reporting period, five meetings were organized (16 October 2014, 5 November 2014, 23 December 2014, 16 January 2015 and 3 February 2015). A total of eight participants (all females) attended the meetings. Three are CAP-TB officers, two are from Rayong PHO and three are from Rayong Hospital. The project working group meeting is aimed to review, follow up and monitor the implementation of project activities planned for that particular quarter as well as for each month. It allows the project working group to plan the activities and to discuss and brainstorm on potential solutions. The goal is to ensure that activities are organized as planned.

Project activities discussed and monitored during the monthly project working group meetings included the TB IC guideline and checklists meeting; support to Mongkut Rayong on their reporting and patient referral systems; the organization of workflow analysis and review of TB/MDR-TB materials, and a series of activities planned to build capacity of VHV in Ta Pong and Yai Da sub-districts.

## **E. Enabling environment for MDR-TB control and prevention**

### **Output 4.1: Strengthened partnerships for quality TB care, including private sector**

#### **Activity 4.1.1: Strengthen involvement of private hospitals for MDR-TB management**

Rayong PHO invited Mongkut Rayong Hospital to the bi-monthly case conferences to hear updates on the MDR-TB patient cohort. One representative (female) from Mongkut Rayong attended all case conferences organized in the reporting period. This same representative also attended the workflow analysis and IEC material review meeting.

### **Output 5: Model programs expanded and use of best practices strengthened**

#### **Activity 5.1.2: Kanchanaburi expansion**

In response to the ongoing outbreak of MDR-TB in Ta Maka District, Kanchanaburi Province, USAID and CAP-TB project were requested to provide support to Makarak Hospital. After hearing about the TB/MDR-TB situation in this district and presenting the CAP-TB model, it was decided that the technical assistance model that CAP-TB implements in Rayong Province has potential to strengthen the TB team and network in

Kanchanaburi, with goal to gain control over the MDR-TB outbreak. The project has signed a sub-agreement with Makarak Hospital in Ta Maka District to organize monthly meetings for the TB team and network to facilitate communication and information exchange, as well as to build technical capacity on MDR-TB.

Considering the lack of health care providers at Makarak Hospital, especially in proportion to the number of MDR-TB patients, CAP-TB will support two coordinators to work at the hospital. Their role will be to support the TB team and network in providing better care and support to MDR-TB patients. The signed sub-agreement is effective from 1 April 2015 to 31 September 2015 with the potential of renewal based on the availability of funds and performance.

## **F. Capacity building and technical assistance**

The CAP-TB Project (Thailand Program) built program management and technical capacity in TB/MDR-TB management of the project implementing agencies through various activities, including bi-monthly case conferences, training workshop and regular project monitoring visits. During the reporting period, CAP-TB conducted two teaching sessions for the TB network in Rayong. The first session was conducted on 21 October 2014, in which the project presented information about MDR-TB patients with diabetes. The second teaching session, on 23 December 2014, focused on a pleural TB case discussed at the BMA case conference on 26 November 2014 in Bangkok. The case was challenging both in terms of diagnosis and treatment.

On 11-13 March 2015, CAP-TB conducted a provider-patient communication training for 26 participants (two males, 24 females - *CAP-TB indicator 16*) from provincial, district and sub-district level hospitals, namely Rayong, Maptapud, Klaeng, Ban Khai, Ban Chang, Pluakdaeng, Wangchan, Khaochamao, Nikompattana. Tapong SHPH, including Rayong Central Prison, Mongkult Rayong Hospital and Rayong PHO at Classic Kameo, Rayong Province. Motiv8 techniques were used as the core training concept. Those who participated for the entire three-day course received a certificate of attendance. CAP-TB will continue to follow up with the participants how they have applied the knowledge and skills to their work.

Intensive capacity building has been done with the three CAP-TB coordinators who are based at Rayong Hospital and Rayong Provincial Health Office. The areas of focus range from technical in clinical TB skills, to data organization and presentation, case presentation, and TB referral network strengthening.

### **Table: Program level monitoring results (Please fill in separate excel sheet)**

#### **Annex I: Method used to estimate total number of individuals reached and adjustment factor to calculate for potential overlap among different partners and other USG (Narrative)**

The only estimation reported is the number of people attended World TB Day activities in Klaeng. Other data reported are actual numbers. Rayong Province receives funding from the Global Fund, however, CAP-TB activities and support are completely distinct from Global Fund support. CAP-TB's focus on technical capacity building, case conferences, and TB network strengthening do not overlap with the Global Fund activities in Rayong.

#### **Annex II: Processes carried out to ensure data quality**

The Rayong PHO Field Manager is responsible for the review and verification of data submitted from the four hospitals. The CAP-TB Thailand Country Program Manager reviewed data submitted by Rayong PHO. When needed, the CAP-TB team asks for further verification and confirmation of the reported data from Rayong PHO to ensure data accuracy.

#### **Annex III: Summary of accomplishments against the work plan and targets (see separate Excel sheet)**