

# **International Workshop on Sustainable Financing for TB Programs, including Experiences from HIV/AIDS and Malaria Programs**

---

April, 2013



This report was made possible through the support for the TB CARE I provided by the U.S. Agency for International Development (USAID), under the terms of cooperative agreement number

AID-OAA-A-10-00020.

### **Abstract**

An international workshop was held in Indonesia in April, 2013, to share experiences of several Asian countries on sustainable financing for TB, AIDS and Malaria control programs. Many important topics were raised, including the roles of government, financing through government budgets and/or insurance, the need for information on costs, the importance of efficient service delivery systems and the need for effective advocacy. Many topics for operational research were identified. The Indonesian National TB Control Program learned about other country approaches to sustainable financing which will help strengthen its own strategic planning.

### **Recommended Citation**

This report may be reproduced if credit is given to TB CARE I. Please use the following citation:

Collins, D., F. Hafidz, and J. Rostina. 2013. *International Workshop on Sustainable Financing for TB Programs, including experiences from HIV/AIDS and Malaria Programs. Management Sciences for Health, TB CARE I Indonesia – April, 2013*. Submitted to USAID by the TB CARE I Program: Management Sciences for Health. Information shown in the annexes may not be quoted or reproduced separate from the rest of the document without the written permission of Management Sciences for Health.

### **Key Words**

TB, HIV/AIDS, malaria, Indonesia, China, Myanmar, Philippines, Thailand, Laos, Malaysia, Vietnam. Sustainability, Financing, Insurance, Advocacy, Planning, Budgeting, Exit Strategy

### **Disclaimer**

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development, the United States Government or the Government of Indonesia.

Management Sciences for Health  
784 Memorial Drive  
Cambridge, MA 02139  
Tel: +1(617) 250.9500  
Fax: +1(617) 250.9090  
[www.msh.org](http://www.msh.org)

Management Sciences for Health  
c/o KNCV Tuberculosis Foundation Indonesia  
Gedung Menara Bidakara 2, Lt.18  
Jl. Jend. Gatot Subroto Kav. 71-73  
Pancoran – Jakarta Selatan 12870  
Indonesia

# Table of Contents

<b>Acknowledgements</b> .....	4
<b>Executive summary</b> .....	5
<b>1. Introduction</b> .....	7
<b>2. Workshop Organization</b> .....	8
<b>3. Workshop Results</b> .....	8
a. Country summaries .....	8
b. Country Comparisons .....	11
c. Lessons Learned and Challenges Identified.....	12
d. Operations Research .....	17
<b>4. Way forward</b> .....	17
Annex 1. Key points from the presentations.....	19
Annex 2: Workshop agenda .....	36
Annex 3: Challenges to sustainability identified during the discussions .....	38
Annex 4: Results of workshop discussion on financing sources and payment mechanisms for TB services.....	41
Annex 5: Participants .....	42

## **Acknowledgements**

This workshop was a collaborative effort by the Indonesian Ministry of Health National Tuberculosis Program (NTP) and the United States Agency for International Development (USAID), through the TB CARE I Project. Many thanks are due to Dr Dyah Mustikawati, Director of the NTP, for her invaluable comments and feedback.

The workshop was organized by the Indonesia National TB Control Program and Management Sciences for Health through USAID TB CARE I Project. Thanks are due to the funders – the Global Fund for AIDS, TB and Malaria, USAID's TB CARE I Project and Management Sciences for Health. Thanks are also due to the Bill and Melinda Gates Foundation for supporting the attendance of Dr. Hong Wang. Thanks are also due to the Governments of the attending countries for allowing their representatives to participate.

Thanks are due to the many excellent presenters, including Professor Dr. Ali Ghufro Mukti, Dr. Slamet, Dr. Akhtar and Dr. Hong. Oversight of the workshop was provided by Dr. Dyah Mustikawati of the Indonesian NTP and valuable support was provided by her staff. Support was also provided by KNCV staff, notably Jan Voskens, Jhon Sugiharto, and Attin Utoro.

Additional thanks are due to other people listed in Annex 4 who participated and, in some cases, also facilitated, especially Evina Utami who provided invaluable support with the preparation and implementation of the workshop.

The main organizers of the workshop and authors of this report are David Collins and Julie Rostina of Management Sciences for Health and Firdaus Hafidz of the School of Public Health, University of Gadjah Mada, Indonesia.

## Executive summary

Most developing countries are facing increasing costs for AIDS, TB and malaria (ATM) control as they scale up services to meet the Millenium Development Goals (MDGs) and pursue the eventual goal of eliminating these deadly and debilitating diseases. Many of these countries have been heavily supported by donors, especially the Global Fund for AIDS, TB and malaria (GFATM) and the United States Agency for International Development (USAID). As the economies of some of the countries improve, donor funding is reducing and those countries have to greatly increase their domestic financing for the ATM programs to ensure that they are financially sustainable. In some cases this will pose a significant challenge if the governments do not have strong taxation systems or health insurance schemes and if there are competing demands for additional revenues.

A workshop was held in Indonesia on the 17<sup>th</sup> and 18<sup>th</sup> April, 2013, to discuss the financial sustainability of the ATM programs. The workshop was supported from the Global Fund for AIDS, TB and Malaria (GF ATM) grant to Indonesia for TB, by Management Sciences for Health (MSH) and by USAID TB CARE I project. The participation of Dr. Hong Wang was financed by the Bill and Melinda Gates Foundation. It was attended by ATM program managers from eight Asian countries with differing disease burdens and economic situations (see Table 1) and the objective was to share lessons and identify challenges and research needs.

The following countries were represented: China, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Vietnam. All of the eight countries presented successes in terms of progress towards the MDGs but all also reported programmatic challenges to varying degrees. In terms of financial sustainability, four of the eight reported serious concerns about one or more of their ATM programs. Three of the four who did not express concerns were Malaysia, Thailand and China, who indicated that they currently receive little donor funding for the ATM programs and do not anticipate financial sustainability challenges. The fourth was Myanmar who receives substantial donor funding but that is not expecting that to decrease any time soon. The four countries that did express concerns over financial sustainability were Lao PDR, The Philippines, Indonesia and Vietnam. Lao PDR reportedly receives substantial donor funding for TB but that is expected to decrease over the next few years, while TB control costs are expected to rise. The Philippines receives significant donor funding for TB and malaria and this is expected to fall over the next few years while program costs are expected rise. Indonesia receives significant donor funding for TB and it is expected to decline considerably over the next few years while costs will rise substantially. Vietnam receives significant donor funding for TB and AIDS and malaria, and this funding is expected to decline significantly over the next few years, precipitously in the case of AIDS, while costs are expected to rise.

Several lessons and challenges related to financial sustainability were identified and were used to develop a potential operations research agenda. The principle lessons and challenges were:

- ATM control costs are likely to continue to increase in all countries and in some countries that is likely to happen at the same time that donor funding falls

- Government commitment is essential but is not generally strong and more and better advocacy is required
- In some cases service delivery systems may need to be restructured to be more cost-effective, efficient and affordable. This will need to take into account the degrees to which the programs should be vertical or integrated
- Better evidence on costs and cost-effectiveness is needed to support service and financial restructuring and advocacy
- The main sources for financing are likely to be government budgets and health insurance, and an important challenge will be to find the combination of these that will produce the best programmatic results
- National social insurance will only be able to provide additional revenue for health (including ATM) if there is a sufficient base of private sector companies and employees to contribute.
- The push to universal health coverage (UHC) should support the sustainability of the ATM programs but the UHC goal of getting essential packages of health services to whole populations will also require substantial financing which may restrict the availability of additional ATM program financing
- The financing policies and payment mechanisms should form an integrated package of policy levers, such as supportive government regulations, using insurance to enforce good practices and using incentives to strengthen weak links
- Human resources and essential medicines and supplies are key elements of sustainability and require separate financing (and programmatic) strategies
- The roles of the private health sector – both for-profit and NGOs and CBOs – can be important in terms of getting services to the people and should be taken into account when developing the financial sustainability strategies

Some of these key challenges and related recommendations are summarized in Table 2.

At the end of the workshop the participants agreed that the countries should continue to share experiences and that a mechanism to do this would be sought.

# 1. Introduction

Great progress has been made in tackling TB, AIDS and malaria over the last few years and many countries are close to achieving the MDGs. However, much more remains to be done to eliminate them and costs will continue to rise for several years.

Some of these countries are experiencing or expecting significant reductions in donor funding and will have to increase domestic financing to cover the gaps. During this transition, which may take several years, there are concerns that the programs will collapse and the people who depend on them will suffer. These countries need to develop and implement sustainable financing strategies so that the investments made so far are not wasted and they can reach the goal of eliminating these diseases.

AIDS, TB and malaria (ATM) are high-priority infectious diseases because they are major causes of disability and death. Controlling them is a public good and it is the responsibility of a government to ensure that sufficient financing is available even if the sources of financing are mixed, such as from the government and/or insurance. The government is also responsible for ensuring that the financing system results in the provision of necessary preventive and curative elements of good quality to all those in need and in an equitable and effective way.

The need to increase domestic financing is occurring at the same time as the push to implement universal health coverage (UHC). The goal of UHC is to ensure that all people have access to good quality, essential health services. This is a laudable goal but will not be easy to achieve given resource constraints, the need to increase domestic funding for ATM, and the need to expand service packages to include illnesses such as non-communicable diseases.

The purpose of the workshop was to share experiences on the current financing of TB, AIDS and malaria control programs in the participant countries and the financing sustainability challenges<sup>1</sup>. This theme is of high relevance to the Indonesian Ministry of Health (MOH) and several of the other countries as they prepare strategies and plans for financing their programs from domestic sources.

The objectives of the workshop were defined as:

- To share lessons and ideas on how best to finance successful TB, AIDS and malaria control programs in a sustainable way
- To develop a synthesis of lessons learned and ideas and an agenda for operations research to enrich the regional knowledge base.
- To create a network to continue sharing experiences.

The participants presented on countries from Asia – China, Indonesia, Lao PDR, Malaysia, Myanmar, The Philippines, Thailand and Vietnam. Cambodia was invited but was unable to

---

<sup>1</sup> Other sustainability issues, such as the procurement and management of medicines and the training and deployment of human resources, were not included specifically in the workshop agenda because the focus was financing. But where these and other issues were raised during the workshop they are noted in this report.

send a representative. The participating countries represent different cultures, political and social systems and economies. The workshop was financed from the Global Fund for AIDS, TB and Malaria (GF ATM) grant to Indonesia for TB, Management Sciences for Health and USAID's TB CARE I project. The participation of Dr Hong Wang was financed by the Bill and Melinda Gates Foundation.

## 2. Workshop Organization

The workshop was organized as follows (see Annex 1 for agenda):

- Welcoming speech by the Indonesian MOH Director for Communicable Disease Programs,
- Speech on the global TB epidemic by the WHO TB Program Representative,
- Introductions, background and format of the workshop by the TB CARE I TB Financing Technical Lead,
- Health financing reforms in Indonesia by the Vice-Minister of Health,
- Global health financing trends by the Bill and Melinda Gates Foundation representative,
- Country presentations on program performance and financing by the program representatives,
- Group discussions on health financing challenges, solutions and research needs, focusing on Indonesia and Vietnam as two countries with representative and significant sustainable financing challenges,
- Summary of discussions and discussion of future actions.

## 3. Workshop Results

### a. Country summaries

The presentations made during the workshop would take up too much space to be included in this report<sup>2</sup>. The key points of each presentation are included in Annex 1 and a brief overview of the presentation on each country follows:

- **China** reported on TB control financing. It has about 14% of the world's TB cases and has the second highest TB burden in the world. It has significant programmatic challenges, including low public awareness and case detection and a fragmented service delivery system, which result in low levels of treatment. TB program financing is provided from a mix of insurance and government budgets but provider payments and incentives are not well-aligned. System improvements are being piloted. Scaling up will require additional financing. China is an upper middle-income country and does not have major donor funding.
- **Indonesia** reported on TB control financing. It has one of the highest TB burdens in the world but has made good progress in tackling it and should reach the MDG. However,

---

<sup>2</sup> They can be obtained from Julie Rostina at jrostitina@msh.org.

further scaling up is needed, especially to get treatment to the large number of MDR-TB cases, and this will require additional financing. It has a high level of GF ATM funding and, as an upper-lower-middle income country<sup>3</sup> with an improving economy, is facing donor funding cuts. It has a high level of health insurance and will have national social insurance from 2014 which aims to cover the whole population by 2019. It is developing sustainable financing strategies for TB, AIDS and malaria which involve a mix of financing from insurance and government budgets. One of its challenges is ensuring good TB control and sustainability under a decentralized health system with around 500 autonomous local government units.

- **Lao PDR** reported on TB control financing. Incidence is much higher than previously estimated and resource needs will continue to increase. As a lower lower-middle income country the program depends heavily on donor funding (Global Fund) but that is expected to decrease and there is a lack of Government commitment to cover any shortfalls. Only government employees have health insurance and that only covers about 10% of the population and does not include coverage for TB diagnosis and treatment.
- **Malaysia** reported on AIDS, TB and malaria control financing. It has made good progress with ATM control targets. The costs of the TB and malaria programs are expected to be generally stable over the next 3 years but AIDS program costs are expected to increase and financing cost of MDR-TB and XDR-TB treatment are a concern. It is an upper-middle-income country and does not have major donor funding. It funds the programs mainly through the government budgets. It faces some challenges with service integration and longer-term government financing commitment. There is no strategy to finance health care through insurance at this stage and the government will remain responsible for funding these programs.
- **Myanmar** reported on AIDS, TB and malaria control financing. It has made good progress with ATM control but program costs will increase. It is a low-income country and has very substantial donor funding which is likely to continue for some years. The programs are financed from government and donor sources and user fees are charged for some services. There is health insurance but less than 1% of the population is covered. Their main issue seems to be a lack of integration of financing and services between donors and government and the level of government investment in general health services.
- **The Philippines** participant reported on AIDS, TB and malaria control financing. It seems to be doing well with TB control but will have to scale up significantly to cover the large number of MDR-TB cases. Malaria control has been progressing well. Numbers of registered AIDS cases are rising rapidly and only 45% of patients with AIDS are apparently on ARVs. Like Indonesia it is decentralized with autonomous local government units. It has a mature insurance program covering 86% of the population and includes ATM services in the benefits package and they now cover indigents. Revenues from health insurance are not retained by the health program unless the collecting

---

<sup>3</sup> Ratings taken from the Global Fund eligibility list for 2012 funding channels

facilities are autonomous. The numbers of approved providers has risen significantly and is now about 1,200. It has some programmatic challenges, such as with laboratory services and human resources. It is classed as a lower-lower-middle income country with a low AIDS burden, a moderate malaria burden and a severe TB burden. It has significant donor funding for the malaria and TB programs, less for the AIDS program, and these donor funds are expected to decline while costs will rise.

- **Thailand** reported on AIDS control financing. It is doing well on meeting its targets but they are still scaling up the provision of ARVs and costs have risen significantly and will continue to rise. It is an upper middle-income country and funds 86% of the costs domestically. Donor funding is mainly for prevention and this should now be financed domestically. It funds the programs mainly through health insurance but through 3 different schemes, which is not very efficient from the perspectives of the schemes, providers and patients since that involves different benefits packages, different sets of claims and administration procedures, and the need to consolidate different sets of reporting data to have national information.
- **Vietnam** reported separately on TB and AIDS control financing
  - **TB.** Vietnam is a high burden country for both TB and MDR-TB. Most TB services are provided by government facilities. At this stage they only have commitments for about 30% of the TB funding that they need in 2013 and resource needs are continuing to rise. Donors fund about 40% of the TB program. About 30% of funding is from the government, 10% from insurance and 20% from user fees. Vietnam is classified as a lower lower-middle-income country<sup>4</sup>, with an improving economy, and donor funding for TB is likely to decline, but government commitment is not strong and funding is likely to be insufficient. Performance-based incentives are used. About 64% (2011) of the population is covered by insurance but anti-TB drugs are not included in the benefits package because they are provided by the government (although the Governmental funding in 2013 is inadequate to cover all the drugs needed). Other challenges include weak collaboration between the public and private providers and staff shortages and frequent changes.
  - **AIDS.** In terms of AIDS, new infections have reduced and treatment with ARVs has increased, but significant scaling up is needed. About 73% of the AIDS program funding and 97% of ARV costs are funded by donors (PEPFAR and GF ATM). The contribution from insurance is believed to be low. Examination and treatment for PLWHIV is included in the benefits package but only 8% to 30% of PLHIV have health insurance cards. There is no information available on the use of HI services by PLWHIV; currently all ARV (and OI) drugs, which are considered most important for treatment of HIV/AIDS, are provided by and through vertical HIV/AIDS programs.

---

<sup>4</sup> Global Fund Eligibility List for Renewals in 2013

## b. Country Comparisons

Some conclusions that can be drawn from the country presentations are as follows:

- Although successes have been achieved in controlling TB and HIV/AIDS in all countries, there are still challenges in meeting all the needs in the countries except Malaysia and Thailand. Malaria seems to be less of a problem in general.
- Total resource needs are expected to continue increasing in all countries, partly related to the need to provide more Anti-Retroviral supplies (ARV) and MDR-TB medicines.
- Donor dependence for ATM services is high in Indonesia, Lao PDR, Myanmar, The Philippines and Vietnam.
- Only Indonesia and Vietnam, however, reported having major sustainable financing challenges and these appear to relate mainly to AIDS and TB control. Both countries are classified as lower middle income due to their improving economies and donor funding is being reduced accordingly. Lao PDR also reported facing a challenge but the extent of that challenge is not clear.
- The sources of domestic financing for the ATM programs vary across the countries: Malaysia relies almost entirely on government budgets; Thailand<sup>5</sup> and The Philippines rely mainly insurance for diagnosis and treatment; China, Indonesia and Vietnam rely on a mix of government and insurance funding and Vietnam also has out-of-pocket financing. Lao PDR and Myanmar rely mainly on government funding. Myanmar also has significant out-of-pocket funding.
- National social health insurance is in place in China, Indonesia, The Philippines, Thailand and Vietnam, although, in some countries, not all the population are covered, the benefit packages are limited and the amounts paid to providers is less than the cost of providing the services. Malaysia does not currently have social health insurance but is reportedly considering it for the future. Myanmar and Lao PDR do not have social health insurance.
- ATM services are covered to some degree by insurance in China, Indonesia, The Philippines, Thailand and Vietnam.
- The formal private health sector (excluding NGOs funded by donors) is only involved in service provision to a significant degree in Indonesia, Malaysia, The Philippines and Thailand.
- Insurance payments to primary care providers are made on a capitation basis in China, Indonesia, The Philippines, Thailand and Vietnam. Secondary-care providers are generally paid on a fee for service or case-based system.
- User fees (including co-payments) are charged for some elements of ATM services in China, Indonesia, Myanmar, The Philippines, Thailand, and Vietnam.

Some of the key differences across the countries can be seen clearly from Table 1. For example, Malaysia is much wealthier than some of the other countries and combats its high burden of AIDS and TB in public and private facilities with domestic financing from the government.

---

<sup>5</sup> The government provides some free drugs and also some subsidies to the insurance schemes.

Table 1: Comparison of ATM priorities, services and financing

Country	GDP per capita 2011 (US\$)	GFAT M class <sup>6</sup>	Disease burden <sup>7</sup>			Formal service provision	Programs presented	Donor funding level and trend <sup>1/</sup>	Current domestic financing <sup>1/</sup>	Medium-term future domestic financing <sup>1/</sup>
			AIDS	TB	Malaria					
China	5,445	UM	H	S	L	Mostly public	TB	None/same	Government and insurance	Government and insurance
Indonesia	3,495	ULM	H	S	H	Public and private	TB	High /decreasing	Government and insurance	Mixed government and insurance
Lao PDR	1,320	LM	H	S	H	Public	TB	High/ decreasing?	Mostly government	Mostly government
Malaysia	9,977	UM	H	H	M	Public and private	AIDS, TB, Malaysia	None/same	Mostly government	Insurance
Myanmar	NA	L	H	S	S	Mostly public	AIDS, TB, Malaria	High/ increasing?	Government / OOP	Government
Philippines	2,370	LLM	H	S	M	Public and private	AIDS, TB, Malaria	High for TB and malaria, less for AIDS. All decreasing.	Mostly insurance	Mostly insurance
Thailand	4,972	UM	H	S	M	Public and private	AIDS	Low/same	Mostly insurance <sup>8</sup>	Mostly insurance
Vietnam	1,407	LLM	H	S	M	Mostly public	TB, AIDS	TB/medium AIDS/ high. Both decreasing	TB – government, OOP, insurance. AIDS – mostly government	Mostly government

<sup>1/</sup>The information in these columns refers only to the programs presented in the workshop.

### c. Lessons Learned and Challenges Identified

When considering the lessons and challenges it is necessary to take into account the significant variations among the countries that were represented: for example, in the sizes of the countries and their populations, the burdens of disease and their strength of their economies. Also the degree of donor dependency and the need to increase domestic financing vary – with Indonesia and Vietnam appearing to have the most significant challenges at this time.

The key lessons learned and major challenges identified are as follows. These mostly relate to the sustainable financing of the ATM programs but include some other challenges that were identified.

<sup>6</sup> UM = Upper Middle, ULM = Upper-Lower Middle, LM = Lower Middle, LLM = Lower-lower middle, L = Low.

<sup>7</sup> S = Severe, H = High, M = Moderate, L = Low.

<sup>8</sup> Some of the AIDS program financing is covered from the provision of free drugs and government subsidies to the insurance scheme.

- **Cost increases** will probably continue in all the countries in the short-term as TB case finding and treatment targets are met, especially as MDR-TB treatment is scaled up. Costs will not come down until incidence rates and treatment rates fall. In the case of AIDS costs will arise as long as more people are put on ARVs. Costs will only come down in the short term if ARV prices fall and in the long term if infections decrease and the numbers of patients on ARVs reduces. Malaria transmission is generally low in South East Asia but the problem of drug resistance in some countries will probably mean that costs will increase.
- **Government commitment** is essential but it can often be difficult to get because officials believe that donor will not withdraw funding from key programs. Also there are many competing demands for government funding and it can be hard to make the case that more funds should be given to the health sector and that, within the health sector, additional funds should be given to ATM programs versus other health challenges. It is important to get this commitment well in advance of reductions in donor funding as making policy and/or budget changes can take considerable time. Effective, evidence-based advocacy is important as well as stakeholder analysis. Decentralized governance complicates the challenge as the commitment has to be obtained from many government authorities and monitoring progress takes more time and effort.
- **Service delivery systems** often need to be restructured since donor-funded vertical programs are sometimes not cost-effective, efficient or affordable from the domestic financing perspective, for example in the case of supervision that only covers one disease. This will need to take into account the degrees to which the programs should be vertical or integrated. If programs are to be integrated more into general health services, decisions on restructuring will be necessary before determining how to finance a program.
- **Prevention** is a crucial element in achieving the program goals and controlling costs but it is often easier for service providers to focus on diagnosis and treatment which are driven more by demand. Recognizing that treatment of infectious diseases is also a form of prevention it is still necessary to take other actions to prevent transmission in the first place.
- **Cost and cost-effectiveness analysis** are important to determine how service delivery should be structured in a sustainable way and provides necessary evidence for advocacy and for deciding how program elements should be financed (eg the impact on premiums of financing MDR-TB medicines from insurance). A comprehensive analysis of current expenditures and financing is necessary to identify possible inefficiencies and savings and understand which elements are especially vulnerable to donor cuts.
- **Financing** can come mostly from government (eg Malaysia) or mostly from insurance (Thailand). But for insurance to be able to generate financing that is additional to government revenues there must be a sufficient base of private companies and regulations requiring them to provide health insurance. Otherwise, the government will have to provide subsidies. Also it can take time for national insurance schemes to be established

and to cover the whole population and may not be able to resolve short-term financing challenges.

- **Economic capacity** is an important factor in financing. A country with limited capacity may struggle more to finance the ATM programs while maintaining other services. And it may not be feasible in the short-term for a country with low capacity to try to emulate the financing system on one with high capacity.
- **Universal health coverage** is an opportunity to increase domestic funding for ATM services but it could also be a hindrance as there is not likely to be enough money to cover the all the goals of UHC.
- **Financing road maps** are an important way of showing how costs and financing are expected to change over time and when gaps might happen.
- **Policy levers** provide a set of mechanisms for achieving successful programs and are a necessary part of the financing strategy. These include the use of government regulations, using insurance to enforce good practices and using incentives to strengthen weak links.
- **Payment mechanisms** are a key element in achieving program goals but are rarely well designed. Choices include itemized budgets, block grants, case based payments and capitation, performance-based payments and mixtures of these. Payment mechanisms should be designed to enforce good service delivery practices, such as the use of DOTS, and to encourage good performance. Each system has advantages and disadvantages – for example, government budgets can that are capped may mean that there is not enough funding to provide additional medicines if treatment targets are exceeded. Even if insurance cannot generate much non-government funding it can be used as a pooling and payment mechanism.
- **Payment rates** that are lower than costs can result in shortages of key resources. For example, when capitation was introduced in Thailand UC scheme was introduced the rate was not high enough to cover the costs because demand increased due to free care.
- **Revenue from insurance** financing should be retained by the health sector and used to ensure that enough is allocated to the ATM programs. Without retention there is no strong motivation to collect. The facilities need to have autonomy over the use of the funds and it should not be subject to the same limitations as government budgets.
- **Financial incentives** can be important, especially for prevention and detection elements that are difficult to finance effectively through insurance.
- **Access to care** is essential but not always easy to provide. Suspects need physical access to diagnosis, counseling and treatment and providers must be accredited to ensure that services are of good quality. Financial access is also important to provide to prevent financial hardship and ensure access to diagnosis and complete treatment.
- **Human resources** are an essential part of ATM programs but there are many challenges including insufficient numbers of well-trained staff, frequent turnover and a lack of regulations. Greater investments in staffing are needed, including having donor- funded

staff taken over by government, restructuring, greater involvement of Community Health Workers. Countries need separate long-term training and staffing strategies.

- **Medicines and key supplies** are also essential for the programs. Without sufficient ARVs, diagnostic supplies, TB and malaria drugs and bed-nets, the epidemics will resurge. Separate sustainability strategies are needed for financing as well as for procurement and distribution.
- **Private sector providers** can play an important role in service provision but the government needs to have a program for accreditation and quality control and different financing mechanisms may be needed since they need to cover full cost.
- **NGOs and CBOs** often play an important role in developing and expanding the programs but what will be their role after donor funding is reduced and how would they be financed to play that role?
- **Transitioning from external to domestic financing** is a challenge that involves careful strategizing and timing. For example, where a program is both provided and funded by external organizations both elements may have to be integrated into government. In such a case it may be best to integrate the services into the government first until it is functional and have the donors continue to fund it until it is established. And then reduce the funding in accordance with the financing strategy.

The above challenges are summarized together with related recommendations in Table 2.

Table 2: Summary of key challenges and recommendations

<b>Key challenges</b>	<b>Recommendations</b>
Lack of well-prepared, feasible, comprehensive, long-term sustainability plans	Where necessary seek guidelines, technical assistance and training. Involve relevant ministries from the start.
TB and HIV/AIDS costs are likely to increase in some countries as treatment is scaled up - resulting in increasing pressure on domestic finances.	Prioritize interventions and made them cost-effective and efficient.
Inefficient delivery and management systems waste scarce resources.	Improve cost-effectiveness and efficiency.
Lack of clear government commitment on taking over the responsibility for financing.	Develop evidence-based advocacy materials based on economic impact and cost analysis and use to help gain high-level government commitment.
Difficulty in identifying the best sources of domestic financing	Conduct detailed analysis of all potential domestic financing sources and contributions, and feed into long-term plan and roadmap.
Lack of packages of policy levers (regulations, incentives etc) to encourage good program performance	Conduct analysis of feasible policy levers and their expected impact.
Provided payment mechanisms may hinder the achievement of program goals.	Conduct analysis of options and experiences and develop and implement policy changes.
Provider payment amounts are not always sufficient to cover the costs of services	Calculate costs in transparent ways and use to negotiate prices.
Revenue collected from insurance and fees is sometimes not available for use by public service providers.	Analyze revenue retention policies and practices and implement necessary changes.
Due to economic challenges some patients are not able to access services and or suffer hardship.	Conduct patient cost analysis and implement policies that reduce costs and/or provide social assistance.
Supplies of medicines and key lab supplies are sometimes late or interrupted	Develop a separate sustainability plan for the financing and provision of drugs and key supplies.
Insufficient well-trained and motivated staff.	Prepare staffing assessment and needs and develop staffing and financing plan.
People with TB do not always have good access to providers who comply with DOTS protocols.	Conduct spatial analysis of needs and services. Develop and implement accreditation program. Reinforce by only paying providers for approved drugs and services.
NGOs and CBOs play important support roles but have their own sustainability challenges when donor funding ends as governments do not always want to fund them.	Take NGO and CBO services into account when developing the sustainability plans.
There may be temporary gaps in financing as it can take time to scale up domestic resources.	Conducting initial gap analysis projection and use to discuss with the donors and government the possible need for transition funding.
Some countries lack some of the technical skills needed for developing and implementing a sustainability plan.	Develop a technical assistance plan early on and arrange needs with donors.
Lack of useful in-country OR programs that can provide evidence for decision-making.	Develop a well-designed OR agenda based on the key priorities to provide evidence for decision-making.
Lack of international guidelines, case studies and costing and analytical tools.	Donors should develop and make available guidelines, case studies, and costing and financing tools. <i>(See next page for some available tools.)</i>
Not enough sharing of experiences across countries – especially failures and challenges	Implement cost-effective, structured sharing of experiences (eg through Joint Learning Network).

## **d. Operations Research**

All the participants believed that operations research is a very important element in designing and implementing successful sustainable financing for ATM programs. Most, if not all the challenges, stated above require learning from other countries and seeing what works in one's own country. This will require up-front and ongoing investment and should be supported by the donors since it is needed to protect their investments. Some of the key areas can be summarized as follows:

- What is being spent on services, what are the current and projected costs, how can the services be made more cost-effective, efficient and affordable?<sup>9</sup>
- What combinations of funding sources (eg insurance, government) result in the most effective programs?
- What policy levers are required and how can they be combined to best effect to achieve coverage, equity and quality?
- Which payment mechanisms work best?
- What are the most effective forms of advocacy?
- How can revenue from insurance be made available to ATM services.
- Are performance incentives (demand and supply side) useful and how should they be designed?
- What is the potential for financing through insurance and the advantages and disadvantages of using insurance as a pooling and paying mechanism?
- What is the best way to integrate services and how can staffing be structured?
- What is the best way to protect the necessary supplies of medicines etc?
- What protection can be provided for patient costs to ensure that diagnosis and treatment are sought when needed and patients do not fall into poverty<sup>10</sup>.

## **4. Way forward**

The participants all agreed that it will be important to continue to share experiences and that MSH should look for a mechanism to do this, starting with the Joint Learning Network. We also recommend that Cambodia be invited to join the group and consideration could be given to including East Timor and Papua New Guinea. It should be noted that many of these countries have common borders and having common strategies may be beneficial since these are infectious diseases and patients sometimes cross those borders.

---

<sup>9</sup> The TB costing tools presented in the workshop and other costing and financing tools can be found on [www.msh.org/health-care-financing/costing-of-health-services](http://www.msh.org/health-care-financing/costing-of-health-services) or by contacting [dcollins@msh.org](mailto:dcollins@msh.org). Other tools can be found via WHO, Futures Institute and Health Systems 2020.

<sup>10</sup> TB CARE I has developed a tool to estimate these costs.

In the opinion of the organizers, some of the countries should also try to learn from some other individual countries. For example, Indonesia may be able to learn some lessons from The Philippines where the national social insurance scheme is well established and ATM services are already covered, and where the context of decentralization is similar. And several countries can also learn from Thailand where ATM services are largely funded through insurance. The Philippines, Indonesia and Thailand can exchange experiences and ideas of working with private sector providers. All countries should be able to learn from the financing systems and performance incentives being piloted in China. Myanmar and Vietnam can share ideas on how to integrate services that are currently provided as vertical programs. Lao PDR can learn from several other countries on strategies to gain greater government commitment, including the use of effective advocacy.

## **Annex 1. Key points from the presentations**

(Extracted from presentations)

### **Introduction: Directory General of Diseases Control and Environmental Health, Ministry of Health of the Republic of Indonesia**

- The World Health Organization declared TB as a global emergency in the early 1990s, and it still remains one of the most serious communicable disease challenges for public health in many parts of the world and it is one of the Millennium Development Goals (MDGs). Indonesia is one of the highest TB burden countries in the world. The estimated number of TB patients in Indonesia in 2011 was 450,000 and there are an estimated 6,620 MDR TB cases each year.
- Successes in TB Control are one of the anchors of health development. Every year there are massive social and economic costs - indirectly and directly - caused by TB. Because of the debilitating nature of the disease, many people living with TB are unable to go to work or to school, and lose family and friends.
- The National TB Program of Indonesia has achieved progress on several fronts. However Indonesia still has to deal with several challenges in the fight against TB.
- One of these challenges is the commitment of central and local government. In the decentralized health system, financing of TB control largely depends on funding allocations from central as well as local government. In general, local budget allocations for TB control are low due to the large financial contributions from external sources and the competing funding needs of other health programs. At present, funding for the TB control program still relies on external contributions, except for TB drug procurement which is funded through central government allocation. A lack of local political commitment is a serious threat for the sustainability of the TB control program. Therefore, strengthening advocacy to increase TB funding allocations from local and central government is a high priority.
- Limited access to quality DOTS services remains a major problem among the poor, people in urban slums and prisoners, as well as people who live in remote, border areas and islands. For example, poor people living in the cities face socio-economic problems to in accessing DOTS services. Other challenges include high numbers of default cases which are mainly due to limited access, high costs of transportation and other treatment-related costs.
- Many low and middle-income countries are experiencing significant reductions in donor funding for TB as well as for other infectious disease programs, such as HIV/AIDS and malaria. In response they are developing sustainable financing strategies to ensure universal, equitable access to such key services.
- It is crucial that the methods of financing such programs ensure that the necessary preventive and curative elements are provided to all those in need and in an equitable and effective way. For example, the financing of TB control services through health insurance can extend care to persons not currently reached but at the same time it can leave gaps, such as in active case finding. The design and implementation of comprehensive financing mechanisms for such programs must take into account all elements of these programs and must consider the best ways to finance each element and what are the potential advantages and disadvantages.

## **Global TB Situation: Dr. Akhtar, WHO Indonesia**

According to the latest WHO TB Global Report, progress towards global targets for reductions in TB cases and deaths continues. The Millennium Development Goal (MDG) target to halt and reverse the TB epidemic by 2015 has already been achieved. New cases of TB have been falling for several years and fell at a rate of 22% between 2010 and 2011. The TB mortality rate has decreased 41% since 1990 and the world is on track to achieve the global target of a 50% reduction by 2015. Mortality and incidence rates are also falling in all of WHO's six regions and in most of the 22 high-burden countries that account for over 80% of the world's TB cases.

However, the global burden of TB remains enormous. In 2011, there were an estimated 8.7 million new cases of TB (13% co-infected with HIV) and 1.4 million people died from TB. TB is one of the top killers of women, with half million deaths among women in 2011.

Access to TB care has expanded substantially since the mid-1990s, when WHO launched a new global TB strategy and began systematically monitoring progress. Between 1995 and 2011, 51 million people were successfully treated for TB in countries that had adopted the WHO strategy, saving 20 million lives.

Progress in responding to multidrug-resistant TB (MDR-TB) remains slow. While the number of cases of MDR-TB notified in the 27 high MDR-TB burden countries is increasing and reached almost 60 000 worldwide in 2011, this is only one in five (19%) of the notified TB patients estimated to have MDR-TB.

Innovations in diagnostics are being implemented. The roll-out of Xpert MTB/RIF, a rapid molecular test that can diagnose TB and rifampicin resistance within 100 minutes, has been impressive. Between its endorsement by WHO in December 2010 and the end of June 2012, 1.1 million tests had been purchased by 67 low- and middle-income countries. A 41% price reduction (from US\$ 16.86 to US\$ 9.98) in August 2012 should accelerate uptake.

However, there are critical funding gaps for TB care and control. Between 2013 and 2015 up to US\$ 8 billion per year is needed in low- and middle-income countries, with a funding gap of up to US\$ 3 billion per year. International donor funding is especially critical to sustain recent gains and to make further progress in 35 low-income countries where donors provide more than 60% of current funding.

In 2015, about US\$ 5 billion is needed for the diagnosis and treatment of drug susceptible TB, US\$ 2 billion for diagnosis and treatment of MDR-TB and almost US\$ 1 billion for TB/HIV interventions. In 2013 funding is expected to reach US\$ 4.8 billion in 104 low- and middle-income countries (94% of global cases). These amounts generally exclude funding for TB/HIV interventions, notably ART, that are funded via HIV programs. Thus, an extra US\$ 2-3 billion per year is needed from national and international sources by 2015.

International donor funding of up to US\$ 1 billion per year is needed for low and middle-income countries in 2013-2015 to close funding gaps. This is double the amount of US\$ 0.5 billion expected in 2013 but still much less than the amounts being mobilized for malaria (US\$ 2.0 billion in 2010) and HIV (US\$ 6.9 billion in 2010). Of the international donor funding expected by national TB control programs in 2013, 88% is from the Global Fund.

Funding needs for TB care and control in the Global Plan (i.e. amounts excluding those for research) were estimated to grow from around US\$ 6 billion in 2011 to US\$ 8 billion in 2015. Diagnosis and treatment with first-line drugs for drug-susceptible TB following the DOTS approach account for the largest single share of funding. The second largest component is diagnosis and treatment of MDR-TB, for which the

funding requirement was estimated at US\$ 1 billion in 2011, rising to US\$ 1.9 billion in 2015. The funding requirements set out in the Global Plan are considerably more than the funding amounts reported by countries. For example, the funding required in 2015 according to the Global Plan is about US\$ 2 billion more than the funding reported to be available in 2013. In this context- and with international funding constrained by economic stagnation or recession in traditional donor countries - assessing the funding that can be mobilized from domestic sources is of increasing importance.

There is capacity to mobilize increased funding from domestic sources in low and middle-income countries, especially in Brazil, the Russian Federation, India, China and South Africa (BRICS) that already rely entirely or mostly on national contributions. Increased domestic funding in BRICS will be especially critical for scaling up the diagnosis and treatment of MDR-TB. However few countries use domestic funding for fundamental requirements of TB program such as anti TB drugs, Indonesia is among few countries providing local funding for first line TB drugs.

Ladies and Gentlemen, the fact remains that diagnosis and treatment of TB is one of the most cost effective primary health care initiatives. The cost per person successfully treated for TB with first-line drugs is in the range of US\$ 100 to US\$ 500 in almost all countries with a high burden of TB. In all of the high-burden countries (HBCs), the cost per patient treated is less than GDP per capita. The Global Drug Facility's Stop TB Patient Kit costs only US\$ 22.30 for new cases, although freight, quality control, inspection, agent fees and insurance provide reasons why some countries continue to report unit costs in excess of these prices.

Today's investments in TB control will have significant social and economic benefits for us and our next generations.

## **Present and Future Financing of Health Services in Indonesia: Prof. Dr. Ali Ghufron Mukti, Vice-Minister of Health, Republic of Indonesia**

### **General**

- Based on 2010 statistics Indonesia spent less on health care than the average lower middle income country and government expenditure on health was also relatively low.
- Of total health expenditure, more than average came from government and external sources and less than average came from social health insurance and out-of-pocket.
- Funding flows are very fragmented.
- In 2009 48% of the population had financial protection for health care which was significantly lower than most other countries in the region. By 2011 that had risen to 63%.
- The Government will introduce national social health insurance in 2014 and aims to cover the whole population by 2019.
- Three policy decisions:
  - population covered (100%)
  - benefits package: fully covered, limited coverage, with co-payment, not covered.
  - Premium levels: same for all, government subsidy for the poor, share between employee and employer
- Private health goods (eg inpatient services) will be largely covered by insurance and public health goods (eg preventive services) will be largely covered by government budget allocations.

- Comprehensive basic needs and medical indications, is in accordance with Law No. 40/2004 (Social security act) including TB services
- Forward, the TB financing will be covered by NSHI together with the government for public health services financing
- Unit cost and utilization rates will be the variables used to estimate the premium (based on a projected rate experience)
- TB drugs will be financed by the Government / Donor, the cost will probably not be included in the premiums or reimbursement rates at this stage

## **Major Issues in Health Care Financing in Developing Countries: Dr. Hong Wang (Bill and Melinda Gates Foundation)**

### **General**

- Total health expenditure per capita has increased in Asian countries from 2001 to 2010 but it remains low in many compared with Thailand, China and Malaysia.
- Insurance options:
  - Universal, mandatory, social
  - Public or national health service model (Beveridge) (UK)
  - Classical social health insurance (Bismarckian) (Germany)
  - Voluntary health insurance: community based (CBHI, mutuelles/MHOs) (Eg Senegal, Mali)
  - Private voluntary (commercial schemes) (Eg USA, South Africa)
  - Emerging national health insurance scheme (NHIS) (many Asia countries, Ghana, Rwanda).
- Provider payment mechanisms
  - Purposes - Quality, Efficiency, Equity - thereby improving the effectiveness of healthcare financing aid ultimately contributing to achieving the health goals
  - Mechanisms - Budgets, Salary, Case based payment, Capitation. Performance based payment, mixed payment methods.
- Preliminary assessments
  - Health care access/utilization - outpatient versus inpatient, equity in access
  - Financial risk protection: poverty due to illness, out of pocket payments
  - Cost control - Potential cost decrease/ increase, potential cost shifting
  - Quality of service - potential over-use of services, services delivery indicator (SDI)

### **A social experiment: Rural Mutual Health Care (RMHC) in Rural China**

- Prepayment scheme jointly financed by the farmers and government
- Government: pay premium for the poor and near poor
- Enrollment: voluntary, household as unit
- Benefit package
  - Outpatient: co-payment rate: 50% (village), 40% (township and above), no deductible; Ceiling: 300 RMB
  - Inpatient: No deductible, co-payment rate: 50% (town), 40% (county and above)
  - Ceiling: 350RMB (town), 1850RMB (county and above)

- Management by the community/government
  - Funds collection and pooling
  - Prescription review
  - Reimbursements to providers and patients
- Village doctor
  - Use competition to selectively contract with village doctors
  - Pay village doctor by salary plus bonus (changed from FFS)
    - Base salary
    - User charge
    - Performance based bonus
- Drugs at the village health post
  - Essential drug list
  - Bulk purchasing
- Results
  - Utilization of PHC services increased; self-treatment and hospitalization reduced.
  - Out of pocket expenditure reduced.
  - Provider expenditure reduced.
- 

## **Indonesia TB Control Program Financing - Dr Dyah Erti Mustikawaiti, National TB Program Manager**

### **Background**

- Indonesia population 245 million
- 1 national, 33 provincial and 498 autonomous district governments.
- President has prioritized health as economic growth without good health is not enough.
- Different philosophies re financing of public and private goods – eg should public goods be financed through insurance.
- National regulations to ring-fence % of budget going to health.

### **TB disease status**

- Indonesia is among the top 5 TB burden countries in the world
- Annual prevalence: 281/ 100.000 population (680,000 prevalent cases)
- MDR-TB cases: 6,620 (2011)
- Incidence: 187/ 100.000 population (450,000 incidence cases)
- Mortality rate: 27/ 100.000 population (65,000 people each year)
- Tuberculosis is also accounted for 31,873 deaths/year in women
- The No. 1 non-obstetric/indirect cause of maternal mortality in 2012
- TB is affected by the environment – eg water and sanitation.
- MDG should be reached but that should be seen as the beginning and not the end.

### **TB control program financing**

- Costs expected to double between 2010 and 2014 and continue rising for a few years after

- Donor funding has been significant and the major reason for improvements over the last few years
- Global Fund grants are the main source of TB program funding (66% in 2012) and are expected to decrease significantly from 2016 due to Indonesia's economic improvements and funding will need to increase from insurance and the government budget.
- Government funds all first line TB drugs but GF ATM funds all MDR-TB drugs.
- Donor funds cover case-finding incentives, treatment outcome incentives, hospitalization and drugs for MDR-TB, promotion, prevention and social support. Other costs are covered domestically from government budgets, insurance and user fees.
- TB funding flows are complicated and fragmented.
- MOH is developing sustainable financing strategy to determine which program elements will be financed through insurance and which through central, provincial and district government budgets.
- Present national private sector insurance scheme civil servant insurance scheme cover TB diagnosis and treatment while government covers promotion, prevention, setting norms and standards and policy making and evaluation.
- Insurance payments are made on a fee for service or capitation basis at the primary care level and on a fee for service or per case basis at the hospital level.

#### **Key achievements**

- Significant increase in domestic funding. In 2012 a 19% increase compare to 2011. First line drugs have been fully funded since 2011.
- Developed a sustainability strategy (Exit Strategy for GF grants for ATM)
- Clearly outlines the roles and responsibilities of central, provincial and district tuberculosis programs.
- Developing various economic modeling for TB.
- Inclusion of TB indicator on Minimum Services Standard Package
- Long-term planning for health development includes the National Health Insurance Task Force within the MoH.

#### **Challenges**

- Program still depends heavily on external funding sources
- Need a mechanism to harmonize different funding sources.
- TB competes with other health problems, not just malaria and AIDS but other diseases (such as non-communicable diseases).
- Not yet possible to fully capture the amount of domestic funding needed for tuberculosis
- As long as there will be substantial external funding available for tuberculosis, it will be difficult to persuade the government to allocate more domestic funding.
- Government budgeting is based on ceiling amounts for tuberculosis. It is based on historical amounts rather than on needs and is not performance-based.
- Out-of-pocket expenditures for tuberculosis diagnosis and treatment can be a burden for patients.

#### **Way forward**

- Continuing efforts to increase domestic financing for ATM through regulations.
- The integration of TB into the future national insurance scheme is seen as one option for replacing donor funding but the preliminary research indicates that there will be lots of challenges to making this integration smooth.
- To overcome these challenges will require learning from other countries and developing a clear roadmap as well as a lot of advocacy to get consensus and political commitment.

## **China TB Program Financing (Dr. Hong Wang)**

### **TB situation**

- Annual new TB cases: 1.5 million;
- It is about 14.3% of new cases in the world;
- It is ranked 2<sup>nd</sup> in the world in terms of disease burden;
- Public knowledge regarding TB control: 57%;
- Only about 47% pulmonary TB patients with symptoms have visited health care providers;
- About 6.8% of pulmonary TB patients is MDR TB patient
- TB services are traditionally provided through special Communicable Disease Control centers.

### **Health system challenges to TB control – demand side**

- Financing:
  - Case detection: insurance benefit package does not cover outpatient services in many rural health insurance schemes
  - Case treatment: although DOTS is free, other diagnostic tests and drugs are not.
- Knowledge:
  - Poor knowledge of TB
  - Stigma associated with TB delays TB suspects visiting TB clinics for diagnosis

### **Consequences:**

- Delay of early diagnosis and treatment

### **Health system challenges to TB control in rural China: Provider (supply) side**

- County CDC is responsible for TB diagnosis and treatment with public finance (with limited capacity in clinical services)
- Misaligned incentives for providers in the healthcare system
  - Reimbursed by fee-for-service
    - Distorted price schedule—low or no service fee
    - High profits from tests, injections and drugs
    - Kickbacks from pharmaceutical companies
- Fragmented delivery system: no care coordination among three level of services

### **Consequences:**

- Delay of referring patients who should be referred
- Repeated tests
- Over-prescription of drugs and antibiotics
- No motivation to follow DOTS
- High drug resistance cases

### **Piloted system changes**

- System improvement intervention to improve quality and control cost (first stage): VfM
  - Capitation plus P4P for village and township services
    - Integrated system between village and township
    - Restrict the curative function at village level
    - Training
    - M&E for P4P
- Global budget plus P4P for county hospital services
  - Define county hospital capacity

- Global budget based on capacity of service delivery
  - M&E for P4P
- Integrate TB control into improved system (second stage)
  - Pooling the financial resources for TB control
    - Fund from CDC for diagnosis and first line drug treatment
    - Health insurance coverage (80% reimbursement rate)
    - Fund from Civil Service Bureau (poverty alleviation fund) to cover the poor for 20% additional reimbursement
- Financial incentives for TB early diagnosis and referral at village and township levels (within the P4P)
- Transfer CDC TB diagnosis and treatment roles to county hospital for better treatment and reduction of duplication (cost control)
- Increase CDC's roles on community engagement, patient follow-up, and M&E on diagnosis and treatment.

### **Comprehensive Health Goals**

- Access (equal)
- Financial risk protection
- Public satisfaction
- Quality/efficiency

### **TB Goals**

- Case-finding
- Earlier referral
- High quality and completion of treatment
- Financial burden reduction on TB patient

### **Lao PDR TB Program Financing – Dr. Soth Bounmala (NTP Director)**

#### **Population, health and TB**

- Population 6 million
- Life expectancy at birth – 67 years
- Tb (all types) in 2011 - prevalence 34,495, incidence 11,683, deaths 703
- Expected to achieve MDG

#### **Financing**

- Total cost rising slowly
- Financing (2013) – donors 78%, government 22%.
- In 2016 expected drop of 30% in total funding due to reduction on GF grant
- 2016 target – donors 70%, government 30% (but no increase in government funding).
- Government contribution does not cover TB drugs and Lab equipment and consumables.
- The government funds Health TB staff salaries, electricity, water and communications.
- GF SSF for TB Phase 2 (2014-20160) - GF recommended to decrease by 12% in 2014, 4% in 2015 and 39% in 2016.

#### **Health insurance**

- All government staff have health insurance = 10% of total general population

- No data on other insurance of general people
- Government staff pays 3% of salary for insurance.
- Insurance does not cover TB drug and TB diagnosis
- Insurance scheme depends on Ministry of Labor and Welfare.
- MOH decreed that treatment and care would be free of charge for poor people.

### **Challenges**

- Prevalence of TB is double the the previous WHO estimate - 610/100.000.
- Donor funding is expected to decrease but the commitment of funding from MOH for TB is still limited.
- Delay of disbursements or releasing donor funds due to process.
- Delay of approval PSM plan and procurement.
- Shortage of budget during transition period.
- Limited number of staffs and frequent turn over.
- Internal partnership is still limited.
- Unsure if Phase II of GF TB SSF will be approved.
- Health insurance is very limited for the general population.

### **Malaysia HIV/AIDS, TB and Malaria Program Financing**

- HIV/AIDS, TB and Malaria control has made good progress and is program targets.
- The costs of the TB and Malaria programs are expected to be stable over the next 3 years, whereas the cost of the HIV/AIDS program is expected to increase and with a matching increase in government funding.
- The TB and Malaria Programs are 100% funded by the Government.
- The HIV/AIDS program is 95.4% funded by the government, 1.6% by private and 3% by donors
- TB and malaria services are provided free of charge but not HIV/AIDS
- The challenges faced are:
  - Integrated approach
  - Commitment from Government for sustainability
  - Escalating costs such as for ARVs, MDRTB and XDRTB
  - Options:
    - Donors – eligibility?
    - NGOs dependent on government funding
    - Insurance scheme? Readiness to implement?
  - For the next few years, sustainable financing will have to come from government funding

### **Myanmar HIV/AIDS, TB and Malaria Program Financing - Dr. Thandar Lwin, National TB Program Manager**

#### **HIV/AIDS, TB and malaria program progress**

- Population – 60 million
- HIV/AIDS, TB and malaria programs have made good progress.
- Most services are provided at public facilities except for some HIV/AIDS services which are provided by communities and NGOS

## **Program financing**

- The costs of all 3 programs are expected to increase
- The HIV/AIDS, TB and malaria programs are funded 97%, 94% and 96%, respectively, by donors
- Government health expenditure has been very low as a % of total government expenditure but increased significantly to 3.14% in 2012/13
- The programs are generally financed from government and donors. Outpatient consultations are not funded by donors but are funded by government, user fees and insurance
- Pharmaceuticals are financed from all sources including user fees and insurance
- Government facilities are funded from the national budget. Community-based services are funded at the local level
- No results or performance-based incentives are paid to providers or patients

## **Insurance**

- Social health insurance is part of social security under the Ministry of Labour
- Employees in most occupations are covered but the number of people covered comes to less than 1% of the total population
- There is one TB hospital under the Social Security Scheme which covers inpatient TB treatment
- Donors cover the costs of MDR-TB

## **Challenges**

- Vertical programs are fragmented in terms of financing and service delivery. Plan is to move to comprehensive Township Health Development
- Current social security scheme coverage is too small and national health insurance has not yet been established
- The government budget is not enough and it is difficult to increase more than the previous year. There is a need for evidence to persuade the government that investment in health is worthwhile so that the health sector can compete better with other sectors
- The donor-driven programs and funding are separate from the government system and there is a need for integration. There is a need to just have one health system, channel external funding through the government, and introduce national social health insurance. It will be important to have one planning, budgeting and M&E system

## **Philippines TB, HIV/AIDS and Malaria Financing (Dr Irma Asuncion, Officer in Charge, National Center for Disease Prevention and Control, Department of Health)**

### **Insurance and general coverage**

- Universal health coverage has 3 elements: financial risk protection, improved access to quality services, and achievement of health MDGs.

- By 2012 PhilHealth covered 86% of the population and had an expanded benefits package with case-based rates for 23 most common conditions.
- PhilHealth achieved a membership satisfaction rating of 87% by 2012.
- The health system increased the number of facilities and staff.
- Health services are decentralized following government decentralization.
- Under Local Government Units (LGUs) insurance funds go to Treasury. The Government is considering a recommendation to allow facilities to retain these funds.
- The enrollment of indigents is a new feature and a big plus.
- Facilities that can retain insurance reimbursements can keep a portion give a portion to the staff. They need to have more control over how funds are being used.
- Drugs are being provided by the national government. Facilities should set aside funds to buy drugs if not provided centrally. Some local units also buy own drugs so mixed system.
- They have a quality certification program.

### **TB Control**

- Prevalence and mortality rates are low and falling and detection, treatment and cure rates are high and rising.
- 23% of the estimated total of 10,600 MDR-TB cases were treated in 2011.
- Challenges:
  - Diagnostic algorithm development for efficient use of new diagnostics
  - Infrastructure upgrading and maintenance of culture and DST centers and equipment
  - Certification of laboratories
  - High workload and fast turnover of manpower
  - Development of QA system and M&E plan for new tools
  - Sustainability of the different initiatives especially PMDT, both diagnostics and treatment components (expanding package benefits, include in the catastrophic Z benefits, Sin Tax).
- TB DOTS package is covered by insurance – diagnosis, consultation and anti-TB drugs
- The number of PhilHealth-covered Tb DOTS providers has risen from 8 in 2003 to 1,201 in 2012
- The enrollment of indigents into insurance is a new feature and a big plus.
- Utilization of funds. At facilities – portion of insurance goes to hospital and portion goes to staff. They need to more control over how funds are being used.
- Drugs are being provided by nat govt. Facilities should set aside funds to buy drugs if not provided centrally. Some local units also buy own drugs so mixed system. Certification of quality done.

### **HIV/AIDS**

- Rapidly rising numbers of registered HIV cases.
- 45% of patients on ART claimed from Philhealth
- Other 55% did not because of loss of confidentiality and logistical and administrative challenges

## **Malaria**

- Significant reductions in numbers of cases and deaths
- Malaria treatment covered under outpatient benefit package

## **Thailand – HIV/AIDS financing (Dr Sumet Ongwandee, Bureau of AIDS and STIs, Ministry of Health)**

- Funding sources:
  - Universal Coverage (National Health Security Office) – all Thai citizens
  - Social Security Scheme (SSS) – workers
  - Civil Servants Medical Benefit Scheme (CSMBS) – civil servants
  - National Access to Antiretroviral Program – non-citizens
  - Note each one under a different ministry
- ART program are being scaled up under the UC insurance scheme
- ARVs are covered under all 3 schemes for citizens but CSMBS allows non-listed ARVs.
- Condoms only covered for PLWHA under Universal Coverage
- Lab tests are covered under all 3 schemes for citizens
- Payments for ARVs vary – patients pay nothing or pay and are reimbursed
- UC and SSS patients can use registered public and private hospitals. CSMBS can only use public hospitals
- Only UC has external quality control
- UC, SSS and CSMBS all have clinical audits

## **Financing**

- Expenditure on AIDS has risen by 50% from 2008
- 86% of financing domestic and 14% international in 2011 (roughly same as in 2008).

## **Limitations and lessons learned**

- HIV/AIDS expenditure has increased for 4 consecutive years – mostly due to ARVs which is major part of spending.
- Program is considered affordable as already mostly funded domestically.
- Domestic resources are mostly for treatment, international resources are mostly for prevention.
- Prevention activities should be highly promoted from domestic sources to ensure sustainability.
- Having 3 separate schemes is not efficient and need to combine them into one.
- When the UC scheme was introduced the capitation rate was very low and there was not enough funding for the services. When the free care was introduced the demand increased a

lot and the hospitals did not have enough funds. Not just for TB but for all health services. So the government had to greatly increase resources for hospitals.

## **Vietnam TB program financing (Dr Anh Binh Luong, National TB Control Program)**

### **Status**

- 12<sup>th</sup> highest TB high burden countries and 14<sup>th</sup> highest MDR-TB burden countries.
- Aggressive NTP targets to reduce prevalence and mortality.
- TB service providers – central and provincial TB hospitals (30%), district health centres (50%), commune health centres (10%), private hospitals and health centres (10%).
- NTP budget of US\$ 65 million in 2013 but only has US\$ 20 million available.
- Budget needs to increase over next 3 years
- Financing sources: government 30%, insurance 10%, donors 40%, user fees 20%, private sector 0%.
- Donor funding decreasing because Vietnam has improved economically.
- Program element financing: diagnosis – user fees; outpatient consultation – government; inpatient stay – user fees government, donors and insurance; promotion – donors; prevention – government and donors; social support – donors.
- Performance-based incentives are provided by government for TB detection, examination, treatment follow-up and patient support. Some donor projects also pay incentives.

### **Challenges**

- Challenges to the program elements funded as a vertical program:
- TB epidemic in Vietnam still remains high
- A number of donor have stopped supporting and others have reduced support
- Gov. fund is insufficient to meet the program requirement.
- Anti-TB drugs: In accordance to Vietnam Government policy, anti-TB drugs are free for all TB patients; however, Governmental fund is inadequate to purchase enough anti-TB drugs for TB patients.
- Shortages and too frequent staff changes and rotation among lower levels,
- Poor collaboration between public TB units and private sectors
- Challenges through a national health insurance programs:
  - TB program: no statistics on proportion of people covered by health insurance.
  - Health insurance: no mechanism of anti-TB drug reimbursement because up to now, anti-TB drugs are paid by Vietnam Gov. through TB program

### **Best options**

- Under direction of Vice Prime Minister and Ministry of Health, developing VN TB strategy up to 2020 → basis to call for financial support of VN Gov. and external donors.
- MoH discussion with VN Insurance to establish of paying anti-TB drugs for TB patient by health insurance.
- Develop TB target as socioeconomic development target of provinces.

## **Vietnam HIV/AIDS Financing (Dr Bui Duc Duong, Vietnam Administration for AIDS control)**

### **Situation**

- Reduction of new infections by 30% from 2001 to 2011
- To meet target of 50% reduction by 2015 will be difficult if funding is reduced.
- ART coverage has increased but needs to increase much more by 2015
- 97% of ARV costs are from PEPFAR and GF.
- 73% of overall program funding is from international donors.
- The contribution from insurance is unknown but low.
- Examination and treatment for PLHIV people are covered by insurance.
- Health Insurance Benefits for HIV/AIDS treatment
  - No differences on HI benefits between PLWHIV and others
  - Implementation of the “co-payment” for medical costs according to scheme for different target groups: 5% or 20%

### **Challenges**

- Many PLHIV are not insured (with an estimation of only 8 up to 30% of total PLHIV who have HI card): S&D issue, vulnerable group, poor... and attractiveness/benefit of HI program
- Health Insurance Fund does not pay for drugs or services that have been covered by other funding sources (program or project)
- Current procurement and distribution mechanism of ARV does not support direct HI reimbursement to health facilities
- No data on # of PLWHIV with HI cards and HI services used
- Vietnam does not have sufficient computing and reliable treatment costs of HIV related cost (with and without ART)
- HIV/AIDS services delivery facilities are classified under “preventive health care system” and not eligible to sign direct contract with HI agency
- Some elements of HIV/AIDS care such as PMTCT and VCT are provided by NGOs and need to be integrated into government services.

### **Solutions**

- Policy level
  - Extensive review of the policies on HI for PLHIV,
  - Learn lessons from other neighboring countries
  - Develop guiding documents for reimbursement of HIV related services under HI
- Health system level
  - Restructure of HIV service providers
  - Explore supply chain and distribution of HIV drug under HI mechanism
  - Pilot reimbursement scheme at public health services at different levels
- Demand side
  - Studies/Assessment of barriers accessing HI of PLHIV
  - Encourage the involvement of PLHIV and KAPs group in HI

## Indonesia – TB Control Policy Guidance Studies (David Collins, TB CARE I / Management Sciences for Health)

- This section also applies to HIV/AIDS and malaria
- Universal Health Coverage – access to good quality services without causing financial hardship
- Financing options – increasing financing through government or social health insurance
- Importance of cost-effectiveness, efficiency and cost-control – to improve the coverage that can be afforded
- The challenge is to determine which combination of financing options will result in the best health outcomes
- The advantages and disadvantages of Government funding
  - Government funding for health has to compete with the needs and advocacy of other sectors, and TB funding has to compete with the needs and advocacy of other health problems (eg AIDS). Funding allocation is often influenced by politics.
  - Government funding may be sufficient but not efficient (fragmented) and is generally fixed in advance which works better for activities that are not highly variable with patient numbers (eg prevention).
  - However, a government can regulate and it can incentivize performance
- The advantages and disadvantages of insurance
  - Funded from premiums (with subsidies?)
  - Flexible – funding varies with numbers of services provided
  - Easier to cover facility-based services (diagnosis and treatment)
  - But unless facility is autonomous the funds may go to local government and may not get allocated to TB or even to health.
  - Ability to control by refusing to reimburse if diagnostic and treatment protocols are not followed.
  - The reimbursement method can be used to influence performance.
  - Research topics should address the following topics:
    - Coverage:
      - Population (especially poor and remote communities)
      - Service package
    - Access
      - Availability of approved providers within reasonable distance
      - Economic constraints (fees, transport etc)
      - Availability of communications / education
    - Quality
      - Provision of infrastructure, supplies
      - Availability of trained providers
      - Providers following standards

- How financing mechanisms affect key TB service elements:
  - Promotion and prevention
  - Active case finding
  - Diagnosis
  - Treatment
  - Follow-up and social support
  - Contact and defaulter tracing
  - Linkages with HIV/AIDS and other programs
  - Community awareness
  
- Identified economic research topics
  - Cost and cost-effectiveness
  - Economic access and negative financial impact.
  - Allocation of budget and insurance revenues.
  - Securing key resources: drugs, lab supplies, human resources, infection control infrastructure and supplies, equipment
  - Policy levers:
    - Government regulations
    - Insurance package restrictions
    - Supply-side incentives
    - Demand-side incentives
  
- Prioritization of economic research
  - There is limited time for research as decisions are already being made
  - Costing was an initial priority to assist with time-bound discussions on affordability under the NHIS and for advocacy purposes.
  - Limited resources were available for the other research topics so we started with:
  - Interviews with key players in 3 pilot provinces to identify current issues
  - A desk review of other research
  - Experiences and perspectives of other countries (being gathered through this workshop)
  
- Research into costs
  - Cost of service provision
  - TB and MDR-TB patient costs
  - Economic burden of TB to society
  - Cost-effectiveness of MDR-TB diagnosis and treatment
  - Cost-effectiveness of MDR-TB case finding using new diagnostic techniques
  - Cost-effectiveness of TB prevention, active case finding, contact and defaulter tracing

- Cost modeling
  - Cost estimates are developed using simple, transparent, user-friendly spreadsheet models
  - Costs are based on epidemiological and treatment assumptions that can be modified
  - The models can be used to project costs into the future and to develop what-if scenarios
  - The models will be owned by the MOH and made available to the government at all levels and trainers will be trained
  
- Challenges found from operational research on TB coverage under existing schemes:
  - Membership is sometimes duplicated across schemes
  - Some service elements are still funded by donors
  - Patients can be far from an approved provider
  - Patient transport costs are a problem
  - Need to expand TB agreements across whole country
  - Insurance reimbursement rates are less than cost
  - Information systems are fragmented across schemes
  - The government subsidies to the present schemes are not sustainable

## Annex 2: Workshop agenda

Workshop on Sustainable Financing for Tb Control Programs

17<sup>th</sup> and 18<sup>th</sup> April, 2013

### Schedule

#### Day 1

TIME	TOPIC	PRESENTER	PROPOSED FACILITATOR
<b>OPENING</b>			
8:00 - 8:20	Opening remarks: Welcome speech and purpose and importance of workshop	General Director of P2PL	
8:20 - 8:30	Introductions, workshop objectives and sessions	MSH	
<b>SESSION 1 Health Financing Context</b>			<i>Pak Nyoman</i>
8:30 - 9:00	Present and future financing of health services in Indonesia	Vice Minister of MoH	
9:00 - 9:45	International trends in the financing of health services	Hong Wang (Bill & Melinda Gates Foundation)	
9:45 - 10:00	Questions and comments on the first session	Facilitator	
10:00-10:15	<i>COFFEE BREAK</i>		
<b>SESSION 2 Indonesia TB Program and Financing</b>			<i>Ibu Mardiaty</i>
10:15-10:45	Indonesia TB program goals, progress and challenges	Bappenas	
10:45-11:15	Description of Indonesia TB Services	Dirjen BUK	
11:15-11:45	Financing of Indonesia TB programs	NTP	
11:45-12:00	Questions and comments on the second session	Facilitator	
12:00-12:45	<i>LUNCH</i>		
<b>SESSION 3 Others Country Presentation</b>			<i>Pak Yodi</i>
12:45-13:15	TB program financing in China	Hong Wang (Bill & Melinda Gates Foundation)	
13:15-13:45	ATM program financing in Thailand	Thai NTP Director	
13:45-14:15	ATM program financing in Malaysia	CDC, MoH Malaysia	
14:15-14:45	ATM program financing in Vietnam	NTP Vietnam	
14:45-	Questions and comments on the third session	Facilitator	

<b>TIME</b>	<b>TOPIC</b>	<b>PRESENTER</b>	<b>PROPOSED FACILITATOR</b>
15:00			
15:00-15:15	<i>COFFEE BREAK AND ENERGIZER</i>		
	<b>SESSION 4</b>		<i>Pak Jeff</i>
15:15-15:45	ATM program financing in The Philippines	Philippines OIC NCDPC	
15:45-16:15	ATM program financing in Myanmar	Dept. of Health Planning Myanmar	
16:15-16:45	ATM program financing in Laos	NTP Lao PDR	
16:45-17:00	Questions and discussions on the fourth session		
17:00-17:15	Reflections on discussions and wrap up	MSH	
19:00-21:00	Dinner hosted by MOH		

## **Day 2**

<b>TIME</b>	<b>TOPIC</b>	<b>PRESENTER</b>	<b>PROPOSED FACILITATOR</b>
8:00 - 8:30	Reflections on previous day including summary of presentations and review of schedule for today	MSH	
	<b>SESSION 1</b>		<i>Pak Wawan</i>
8:30 – 10:00	Development of Indonesia's TB program operations research agenda and costing tools	MSH	
10:00-10:15	<i>COFFEE BREAK</i>		
	<b>SESSION 2</b>		<i>Pak Wawan</i>
10:15-12:00	Review key challenges and solutions identified by countries in Day 1	Facilitated discussion	
12:00-13:00	<i>LUNCH</i>		
	<b>SESSION 3</b>		<i>Pak Sugi</i>
13:00 - 15:00	Complete review of challenges and develop list of research topics	Facilitated discussion	
15:00-15:15	<i>COFFEE BREAK</i>		
	<b>SESSION 4</b>		<i>Pak Sugi</i>
15:15-16:30	Continue with review of challenges and develop list of research topics (continued)	Facilitated discussion	
16:30-17:00	Discuss and determine plan for future actions and opportunities for networking	Facilitated discussion	
17:00-17:15	Closing remarks	NTP	

### **Annex 3: Challenges to sustainability identified during the discussions**

- **Government commitment**
  - Long-term commitment from government is needed for sustainability
  - Need to get sustainability put on agenda by getting key political members to support ATM programs
  - As long as there will be substantial external funding available for TB, it will be a challenge to advocate for domestic funding
  - It is much harder to get commitment in a decentralized country where health planning and financing is decided at multiple, autonomous levels of government (eg Indonesia and The Philippines)
  - Minimum standards should be put in place at district levels and government regulations should be used to enforce compliance
  - A sustainable financing roadmap is needed to provide evidence on the sustainability challenges
  - Policy levers should be used in combination (regulation, insurance reimbursement restrictions and incentives)
  - District health score cards should be used to measure performance as used in The Philippines
- **Planning**
  - Planning is sometimes donor-driven
  - Government funding often prioritizes TB curative care not prevention. There is a need for expenditure analysis to show how funds are currently spent and simple cost-effectiveness to show that prevention is more cost-effective than treatment.<sup>11</sup>
  - There are many competing health issues, including increase in non-communicable diseases, and with limited resources, it will be difficult to get all the additional domestic resources needed into the ATM programs
  - A thorough stakeholder analysis is needed before deciding how to finance ATM programs since there may be different opinions (such as between using government budget or insurance funding for the public and private goods elements of ATM programs)
  - Identifying funding options
  - Countries need a mechanism for harmonizing and managing the different sources of funding to ensure that the goals of combined prevention and treatment programs are successful
  - How to best to use funding the most efficiently and effectively
  - More M&E, pay for performance, a cost effectiveness study, high impact strategy
  - Balancing funding from government, insurance, donors, user fees
  - Whether prevention and health promotion come from national health budgets.
- Geographical and economic access

---

<sup>11</sup> Recognizing that treatment of TB and AIDS also serves to prevent transmission.

- Do people have access to accredited providers?
- Do patient costs (eg for TB diagnosis) result in delayed or interrupted treatment and/or force people into poverty
- Ensuring a collaborative and effective approach between public and private health sectors
  - PPP in Vietnam, Public Private Mix healthcare system
  - Private doctors working in public facilities in Malaysia, public doctors also work in private practices
  - In Philippines doctors can legally work in private practices for better salaries after office hours
- Making revenue available to the health services
  - If insurance or user fee revenue is not made available to improve the health services then providers are not motivated to collect and services may be under-funded, thus affecting population coverage and/or quality
  - In other words insurance does not work as a generator of revenue for sustaining ATM services if the revenue goes elsewhere
- How to use provider and patient incentives
  - Early TB detection
  - If monitor TB treatment not given financial incentive in Laos
  - In Philippines incentives discouraged as cannot be sustained
- Human resource shortage and turnover
  - Propose better planning and regulations e.g. Malaysia
  - Ideally donor funded staff should become funded by government, need to restructure (i.e. reduce no. of staff) and remodel
  - Do separate strategy for human resource for long term staff planning.
  - Need to look into getting CHWs more involved
  - Not depending on UHC for strengthening health system
- Medicines and critical supplies
  - It is critical to ensure a constant supply of key medicines and supplies (eg TB-drugs and lab supplies, ARVs, anti-malaria nets) ,which involves ring-fenced financing as well as efficient procurement, storage and distribution
- Operations research is needed to provide sufficient evidence for policy decisions in relatively short periods of time
  - Allocate some government (or insurance) funding to research (e.g., 2% of the budget for each program goes to research in The Philippines
- How do we continue sharing experiences across these Asian countries
  - Write this up and share it- quick version in English and longer one in Bahasa
  - Already a joint learning network, not everyone apart of it
  - Compile recommendations and invite more members from each country
  - Propose specific ATM subgroup
  - MSH can communicate with organizations
  - Agreement to continue communication

The participants developed a matrix of recommendations for sources of funding and payment mechanisms for TB (Annex 3). These indicated a preference for government financing for

community services, a mixture of government and insurance financing at the public health center and hospital levels, and a mixture of insurance and user fees/co-payments at private clinics and hospitals.

## Annex 4: Results of workshop discussion on financing sources and payment mechanisms for TB services

Table 3. Participant preferences for financing, management and payment mechanisms for TB sustainability

	Type of provider									
	Community		Public HC		Public hospital		Private HC		Private hospital	
	Sources	Payment mechanism	Sources	Payment mechanism	Sources	Payment mechanism	sources	payment mechanism	sources	payment mechanism
<b>Program elements</b>										
ACSM/ Prevention	G	B	G	B	G	B	I	IK		
<b>TB</b>										
Active Case finding	G	B	G	B						
Contact tracing	G	B	G	B						
Diagnosis	NA	NA	G/I	C/PI	G/I	CB	I/U	C/PI	I/U	Package
Treatment	NA	NA	G/I	C	G/I	CB	I/U	C (2)	I/U	Package
TB drugs	NA	NA	G	IK	G/I	IK	G/I/U	IK	I/U	
Follow up exam.	NA	NA	G/I	B	G/I	CB	I/U	C/PI	I/U	
Defaulter tracing	G	NM	G	B	NA		G (1)	C/PI	NA	
Social support	G/CS/CSR	NM	G/ CS/ CSR	B	NA		G/ CS/ CSR	IK	NA	
<b>MDR TB</b>										
Active Case finding	G	PI	G							
Contact tracing	G	PI	G							
Diagnosis	NA	NA	NA		G/I		NA		I/U	
Rapid diagnostic	NA	NA	NA		G		NA		G	
Consultation	NA	NA	NA		G/I/U		NA		G/I/U	
Second line drug	NA	NA	G		G		G (1)		G	
Follow up exam.	NA	NA	G		I		I		I/U	
Defaulter tracing	G	PI	G		G		G (1)		G	
Social support	G	NA	G		G		G (1)		G	
Training	G	NA	G		G		G (1)		G	
<b>HIV/TB</b>										
Drugs	NA		G		G		G (1)		G	
Treatment	NA		I		I		I		I	
<b>Program resources</b>										
Provider staff	G/U		G		G/I/U		I/U		I/U	
Provider incentive	NA		I/G		I/G		I/U		I/U	
Equipment	NA		G		G/I/U		I/U		I/U	
IC Infrastructure	NA		G		G/I/U		I/U		I/U	
General infratructure	NA		G		G/I/U		I/U		I/U	
Information systems	G		G		G/I/U		I/U/G		I/U/G	

### CODES:

G	Government
I	Insurance
U	User fees
C	Capitation
CB	Case-based
NA	Not applicable
B	Gov budget
CSR	Corporate social responsibility
CS	Community services
NM	Non-monetary incentive
PI	Performance incentive
IK	In kind
(1)	Reporting only
(2)	Consultation only

## Annex 5: Participants

Name	Institution	E-mail
Prof. Dr. Ali Ghufron Mukti	Ministry of Health (Vice Minister)	<a href="mailto:tuwamenkes@yahoo.com">tuwamenkes@yahoo.com</a> ; <a href="mailto:ghufron_mukti@yahoo.com">ghufron_mukti@yahoo.com</a>
dr. Slamet, MHP	Director of CDC	<a href="mailto:slamet_basir@yahoo.com">slamet_basir@yahoo.com</a>
dr. I Nyoman Kandun, MPH	FETP	-
dr. Dyah E. Mustikawaty	National TB Program Manager (NTP)	<a href="mailto:dmustika_2007@yahoo.co.id">dmustika_2007@yahoo.co.id</a>
Dr. Hong Wang	Bill and Melinda Gates Foundation	<a href="mailto:Hong.Wang@gatesfoundation.org">Hong.Wang@gatesfoundation.org</a>
Dir. Irma L. Asuncion, MD	Director of CDC - Philippines	<a href="mailto:doc_irma@yahoo.com">doc_irma@yahoo.com</a>
Dr. Sumet Ongwandee, Director	Bureau of AIDS and STI - Thailand	<a href="mailto:Sumet_o@yahoo.com">Sumet_o@yahoo.com</a>
Dr Anh Binh Luong	NTP - Vietnam	<a href="mailto:luonganhbinh.vntp@gmail.com">luonganhbinh.vntp@gmail.com</a>
Dr. Vu Huy Diep	Department of Health Insurance - Vietnam	<a href="mailto:huydiepjs@gmail.com">huydiepjs@gmail.com</a>
Dr. Pham Duc Minh	LMG-Transition Support Project of MSH - Vietnam	<a href="mailto:mdpham@msh.org">mdpham@msh.org</a>
Dr. Bui Duc Duong	Vietnam Administration for AIDS Control - Vietnam	
Ms. Vuong Lan Mai	HSPI - Vietnam	<a href="mailto:vuonglanmai@hspi.org.vn">vuonglanmai@hspi.org.vn</a>
DR Shaari Ngadiman	CDC MoH - Malaysia	<a href="mailto:drshaari@moh.gov.my">drshaari@moh.gov.my</a> < <a href="mailto:drshaari@moh.gov.my">mailto:drshaari@moh.gov.my</a> >
Dr Thandar Lwin	Deputy Director TB - Myanmar	<a href="mailto:tdarlwinn@gmail.com">tdarlwinn@gmail.com</a>
Htay Htay Win	Asst Director Planning, Dept of Health Planning - Myanmar	<a href="mailto:Htay2windhp@gmail.com">Htay2windhp@gmail.com</a>
Dr Soth Bounmala	National TB Centre GF project Coordinator - Lao PDR	<a href="mailto:sothbounmala@gmail.com">sothbounmala@gmail.com</a>
Dr. Niken	National Malaria Program	<a href="mailto:nikenwp@yahoo.com">nikenwp@yahoo.com</a>
Dr. Elvieda Sariwati	National Malaria Program	<a href="mailto:vielang@yahoo.com">vielang@yahoo.com</a>
Deni Setia	Subdit Malaria (National Malaria Program)	-
Rini S	Subdit Malaria (National Malaria Program)	-

Hanifah Rogayah	Subdit Malaria (National Malaria Program)	<a href="mailto:hani_rogayah@yahoo.com">hani_rogayah@yahoo.com</a>
Bawa Wiranangtyas, SKM, MM	PMU GF TB	<a href="mailto:emailbowo@yahoo.com">emailbowo@yahoo.com</a>
Dr. Lukman Hakim	PMU GF Malaria	
dr. Triya Dinihari	Subdit AIDS dan PMS	<a href="mailto:tdinihari@yahoo.com">tdinihari@yahoo.com</a>
Budiarti Setyaningsih	Subdit TB (National TB Program)	<a href="mailto:budinienk@yahoo.co.id">budinienk@yahoo.co.id</a>
Novalia Indriasari	Subdit TB (National TB Program)	<a href="mailto:novalia.indriasari@gmail.com">novalia.indriasari@gmail.com</a>
Bambang	Subdit TB (National TB Program)	-
Nurul Badriyah	Subdit TB (National TB Program)	-
Metha Natasia	Subdit TB (National TB Program)	-
Harsana	Subdit TB (National TB Program)	<a href="mailto:harsanadbm@yahoo.com">harsanadbm@yahoo.com</a>
Yusral	Subdit TB (National TB Program)	-
Melina Sari	Subdit TB (National TB Program)	-
Totok H	Subdit TB (National TB Program)	<a href="mailto:to2k@yahoo.co.id">to2k@yahoo.co.id</a>
Endang Budi Hastuti	National AIDS Program	<a href="mailto:endangb22@yahoo.com">endangb22@yahoo.com</a>
Trijoko	National AIDS Program	-
Puji Sri Rahayu	ASKES (Public Insurance)	<a href="mailto:puji.srahayu@ptaskes.com">puji.srahayu@ptaskes.com</a>
Indrianti Wahyuni	ASKES (Public Insurance)	<a href="mailto:indrianti@ptaskes.com">indrianti@ptaskes.com</a>
Dr. Theresia Ronny A	Bappenas	<a href="mailto:theresia_ronny@yahoo.com">theresia_ronny@yahoo.com</a> ; <a href="mailto:theresia.ronny@bappenas.go.id">theresia.ronny@bappenas.go.id</a>
Neli	Pokja BPJS	<a href="mailto:Pokjabpjs.kesehatan@gmail.com">Pokjabpjs.kesehatan@gmail.com</a>
Wenita Indrasari	National AIDS Commission (Komisi Penanggulangan AIDS Nasional (KPAN))	<a href="mailto:wenita@aidsindonesia.or.id">wenita@aidsindonesia.or.id</a>
Prastuti Soewondo, PhD	TNP2K	<a href="mailto:diah.ratnawulan@tnp2k.go.id">diah.ratnawulan@tnp2k.go.id</a>
Elis Widen	UNAIDS	<a href="mailto:widene@unaids.org">widene@unaids.org</a>
Jeff Muschell	USAID	<a href="mailto:jmuschell@usaid.gov">jmuschell@usaid.gov</a>
Cheri Vincent	USAID	
Candyana Johan Tjia	USAID	
dr. Stephanus Indradjaja	GIZ	<a href="mailto:sindradjaja@gmail.com">sindradjaja@gmail.com</a>
dr. Harmein harun	GIZ	<a href="mailto:harmeinh@gmail.com">harmeinh@gmail.com</a>

P. Sandro	World Bank	-
-----------	------------	---

dr. M. Akhtar	WHO	AkhtarM@searo.who.int
Jan Voskens	KNCV	<a href="mailto:voskensj@kncvtbc.nl">voskensj@kncvtbc.nl</a>
Jhon Sugiharto	KNCV	<a href="mailto:jsugiharto@kncv.or.id">jsugiharto@kncv.or.id</a>
Attin Utoro	KNCV	<a href="mailto:attin.utoro@kncv.or.id">attin.utoro@kncv.or.id</a>
David H. Collins	MSH	<a href="mailto:dcollins@msh.org">dcollins@msh.org</a>
Julie Rostina	MSH	<a href="mailto:jrostita@msh.org">jrostita@msh.org</a>
Andrew Marsden	MSH	<a href="mailto:amarsden@msh.org">amarsden@msh.org</a>
Harini Sri	MSH	<a href="mailto:hsri@msh.org">hsri@msh.org</a>
Firdaus Hafidz	UGM	<a href="mailto:hafidz.firdaus@gmail.com">hafidz.firdaus@gmail.com</a>
Emma Waever	UGM	<a href="mailto:waeveremma@gmail.com">waeveremma@gmail.com</a>
Gail Stecley	Global Fund	-
Dr. Atikah Adyas	Joint Learning Network (JLN)	<a href="mailto:atikah_adyas@yahoo.com">atikah_adyas@yahoo.com</a> ; <a href="mailto:sekretariat@pamjaki.org">sekretariat@pamjaki.org</a>
Anis Fuad	Joint Learning Network (JLN)	<a href="mailto:anis.fuad@access.org">anis.fuad@access.org</a>
Dr. Mardiaty Nadjib, MSc	Dr. Mardiaty Nadjib, MSc (FKM UI)	<a href="mailto:mardiatinadjib@gmail.com">mardiatinadjib@gmail.com</a>
Dr. Yodi Mahendradata, PhD	UGM	
Wawan Setiawan	Dinas Kesehatan Jawa Barat (Provincial Health Office - West Java Province)	<a href="mailto:dalkitjabar@yahoo.com">dalkitjabar@yahoo.com</a>
Chandra Pamungkas	Dinas Kesehatan DKI Jakarta Provincial Health Office - DKI Jakarta Province)	<a href="mailto:chandrapamungkas@yahoo.com">chandrapamungkas@yahoo.com</a>
Dr. Hanif	Kepala Bidang - Dinas Kesehatan Aceh (Provincial Health Office - Ace Province)	<a href="mailto:hanif_1971@yahoo.co.id">hanif_1971@yahoo.co.id</a>
Evina Utami	Translator and facilitator	<a href="mailto:evina.utami@gmail.com">evina.utami@gmail.com</a>
Eka Candra	Translator	