Coverage of TB Services under Social Health Insurance in Indonesia

Firdaus Hafidz, Emma Weaver, David Collins and Julie Rostina

November 2013
This report was made possible through the support for the TB CARE I Project provided by the U.S. Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-10-00020.

Abstract

Indonesia has made great strides in expanding tuberculosis (TB) control over the last few years, with significant assistance from donors, such as the Global Fund. While there are presently substantial external funds for the Human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), TB and Malaria health programs, these are likely to diminish greatly over the next few years. The government is developing an exit strategy which aims to eliminate dependency on these grants. Generating revenue from insurance is one of the options for TB sustainability financing. However, there is a need to have a better understanding of the actual and potential for financing TB services through health insurance in Indonesia. To assist with this, we conducted an analysis of national claims data obtained from the public health insurance schemes, and carried out series of interviews with health and insurance managers, and non-Government Organizations (NGOs) in 3 provinces – Aceh, Jakarta, and West Java.

The study provided some interesting results. For example, hospital outpatient TB claims appeared to increase at a much faster rate than PHC-level claims. In addition, the number of inpatient claims appears to be higher than expected based on the national incidence and treatment rates. Issues were identified with the monitoring and evaluation of the TB control program due to fragmentation and lack of coordination among stakeholders (district health offices, health providers (especially private sector) and health insurance schemes). Even though most of the health insurance schemes benefit packages are comprehensive for TB services, concerns were expressed about the quality of services including diagnostic tests, drugs, contact tracing and adherence to required standards.

In conclusion, the design of the provider payment mechanism must assist the Ministry of Health (MOH) to meet its TB program goals through the use of the Directly Observed Treatment, Short-course chemotherapy (DOTS) strategy including increasing the demand of patients to seek diagnosis and treatment. A comprehensive approach to the mixed financing and delivery of services will be essential to ensure that TB control is effective.

Recommended Citation

This report may be reproduced if credit is given to TB CARE I. Please use the following citation: Hafidz F, Weaver E, Collins D, Rostina J. 2013. TB Services and Financial Sustainability in Health Insurance Program, Submitted to USAID by the TB CARE I Program: Management Sciences for Health.

Key Words
Tuberculosis, TB control, TB program, health insurance scheme, Indonesia

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## ACRONYMS

<table>
<thead>
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ATM</td>
<td>AIDS, TB and malaria</td>
</tr>
<tr>
<td>BPJS</td>
<td>Badan Penyelenggara Jaminan Sosial/ Social security body</td>
</tr>
<tr>
<td>DHO</td>
<td>District Health Office</td>
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<tr>
<td>DOTS</td>
<td>Directly Observed Treatment, Short-course chemotherapy</td>
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<tr>
<td>FGD</td>
<td>Focus Group Discussions</td>
</tr>
<tr>
<td>GFATM</td>
<td>Global Fund - AIDS, Tuberculosis, Malaria</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human immunodeficiency virus/acquired immune deficiency syndrome</td>
</tr>
<tr>
<td>IDI</td>
<td>In-Depth Interviews</td>
</tr>
<tr>
<td>INA-CBGs</td>
<td>Case-based reimbursement rates</td>
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<tr>
<td>ICD</td>
<td>International Classification of Diseases</td>
</tr>
<tr>
<td>JKA</td>
<td>Jaminan Kesehatan Aceh (Aceh Health Insurance Scheme)</td>
</tr>
<tr>
<td>JKN</td>
<td>Jaminan Kesehatan Nasional/ National Health Insurance</td>
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<tr>
<td>Jamkesda</td>
<td>Jaminan Kesehatan Daerah (Local Health Insurance Scheme)</td>
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<tr>
<td>Jamkesmas</td>
<td>Jaminan Kesehatan Masyarakat (National Health Insurance Scheme for the poor)</td>
</tr>
<tr>
<td>Jamsostek</td>
<td>Jaminan Sosial Tenaga Kerja (Health Insurance for Employees)</td>
</tr>
<tr>
<td>KNCV</td>
<td>Koninklijke Nederlandse Chemische Vereniging</td>
</tr>
<tr>
<td>MDR-TB</td>
<td>Multidrug Resistant Tuberculosis</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of understanding</td>
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<tr>
<td>MSH</td>
<td>Management Sciences for Health</td>
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<tr>
<td>NGO</td>
<td>Non-Government Organization</td>
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<tr>
<td>NTP</td>
<td>National Tuberculosis Program</td>
</tr>
<tr>
<td>OR</td>
<td>Operations research</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary health care</td>
</tr>
<tr>
<td>PT. Askes</td>
<td>Perseroan Terbatas Asuransi Kesehatan (Health Insurance Company for Civil servants)</td>
</tr>
<tr>
<td>Puskesmas</td>
<td>Pusat Kesehatan Masyarakat/ Community Health Centre</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>UGM</td>
<td>Universitas Gadjah Mada</td>
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<tr>
<td>UHC</td>
<td>Universal Health Coverage</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>XDR-TB</td>
<td>Extensively drug-resistant tuberculosis</td>
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ACKNOWLEDGEMENTS

This study is the result of 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. The authors wish to thank the Director and staff of the National Tuberculosis Program and other senior officials of the MOH for invaluable comments and feedback. The authors also wish to thank the members of the USAID team who support the TB control program.

The authors would like to specifically thank the following people who contributed to the collection of data and analysis for this report:

• Dr Dyah Mustikawati, Budiarti Setyaningsih and Novalia Indriasari of the National Tuberculosis Control Program, Ministry of Health, Government of the Republic of Indonesia.
• Jan Voskens, Koninklijke Nederlandse Chemische Vereniging (KNCV) Indonesia
• Rifka Sibarani, Sri Wahyuni, Dyan, Ida Farida, Raihana Nadra Alkaff, Enumerators.

Additional thanks are also to all respondents whom were invaluable in providing data on Indonesia’s TB program services under health insurance.

Firdaus Hafidz is a Researcher at the Centre for Health Finance Policy and Insurance Management, Universitas Gadjah Mada (UGM), Indonesia. Emma Weaver is a guest Researcher at UGM funded by AusAID as part of the Australian Youth Ambassadors for Development program, Australia. David Collins is the Senior Principal Technical Advisor in Health Financing for Management Sciences for Health (MSH), USA. Julie Rostina is Technical Officer for MSH, Indonesia.
EXECUTIVE SUMMARY

Great progress has been made in tackling TB over the last few years in Indonesia thanks to the commitment of the Government and financial assistance from donors, including the Global Fund for AIDS, TB and malaria (GFATM) and USAID. There is still, however, a need to continue to expand and improve TB control, for example in the area of MDR-TB detection and treatment. Significant reductions are expected in GFATM funding over the next few years and the Government of Indonesia is committed to replacing these funds from domestic sources.

Health insurance is one of the main strategies to replace donor funding. Currently there are three national insurance schemes in Indonesia: Jamkesmas for the poor; Jamsostek for employees; and PT. Askes for civil servants, pensioners and veterans. In addition, there is a health insurance scheme which operates at the levels of provinces and/or districts called Jamkesda. In 2014 the Government of Indonesia will start implementing a national social health insurance program called jaminan kesehatan nasional (JKN) through badan penyelenggara jaminan sosial kesehatan (BPJS kesehatan). This program will replace three of the above schemes: Jamkesmas, Jamsostek and PT. Askes. Jamkesda will remain in place for an undefined period of years to cover poor people who are not registered nationally as poor and will, therefore, not be covered under JKN.

The new program is expected to be fully implemented by 2019, covering all the projected 257 million citizens in Indonesia. The package of medical and non-medical benefits (class of accommodation) will be the same for all beneficiaries. In 2019, 85% of beneficiaries and 80% of health providers are expected to be satisfied with services.

This report presents the results of some brief research into the current coverage of TB services under Indonesia’s public health insurance schemes. This includes an assessment of TB financing under health insurance, an analysis of TB care-seeking behavior across the different schemes, and an identification of some of the challenges that exist and might need to be addressed under national social health insurance.

We used two approaches for data collection. One was an analysis of national claims data obtained from the public health insurance companies. The second study was a series of interviews with health and insurance managers and NGOs in 3 provinces – Aceh, West Java and Jakarta- that are pilot sites for different aspects of JKN. These sites were perceived by
the MOH as having well-developed insurance schemes. The key results from both analyses are presented below.

**TB Claims data analysis**

- The number of TB inpatient claims by PT. Askesand Jamsostek members rose substantially from 2009 to 2010 and again from 2010 to 2011, especially for inpatient services.
- Jamsostek TB claims at the PHC level increased by only 3% from 2010 to 2011, which was much less than the increase in hospital outpatient claims (62%). This could indicate a move away from PHC to hospital outpatient care, which may be less cost-effective and can result in physical access barriers.
- Significant differences in ratios of outpatient to inpatient claims across the 3 national schemes indicate possible differences in treatment algorithms followed by the providers.
- The numbers of inpatient claims appear to be higher than expected based on the national incidence and treatment rates, which may indicate that more patients are being admitted than necessary.

**TB coverage under health insurances:**

- Since Aceh and DKI Jakarta government cover all of their citizens using Jamkesda for persons who are not registered in one of the national schemes, the majority of TB patients have insurance. However fragmentation exists across the schemes, with differences in benefit packages and co-payment, for example.
- Jamsostek membership and benefits are very dynamic due to employment status. For example, discontinuation of premium contribution by an employer can interrupt an employee’s coverage.
- Health managers perceive that only a limited number of providers, especially in the private sector, can treat TB according to required standards. Lack of facilities and human resources are the main reasons.
- Even though almost all TB services are funded by the government and donors, the average cost of a TB patient visit is considered high and increasing every year. In addition, health providers are concerned about provider payment mechanisms and rates.
- Generally all of the insurance schemes benefit packages provide comprehensive cover for outpatient and inpatient TB services at both primary and hospital levels, including TB diagnostic test.
• Since TB drugs can be purchased by health providers based on the health insurance scheme formulary, there is concern that TB treatment does not always follow required standards.

• District offices and health centers sometimes find it hard to trace TB patients to monitor treatment if their details – address, phone number - are not entered correctly in the records. Health insurance schemes should assist with this, especially PT. Askes and Jamsostek, which have Memorandum of Understanding (MoUs) with the NTP for DOTS.

• TB patients that are members of Jamsostek and PT. Askes schemes tend to go to hospitals for diagnosis. They also go to hospitals for treatment even though this can be provided by family physicians at the primary health care level. This is because insured patients believe that health centers are overcrowded and that they deserve to get specialist services at the hospital level because they provide better quality. In addition, diagnosis with TB sputum microscopy at the primary care level is not covered under PT. Askes scheme. Bypassing the health centre causes problems because they do not then have information for contact tracing or tracking patients (which hospitals cannot do).

• TB patients that have health insurance do not appear to have to make any significant official out-of-pocket charges for inpatient or outpatient care. However, even though there are few or no financial barriers in health facilities, patient costs associated with TB are not covered by health insurance, such as travel, food and accommodation costs and loss of income of individual and family members.

• Currently, the health system is fragmented and decentralized. The health insurance information system is not integrated or reported to the national TB program. Consequently, coordination between the TB Control Program and the insurance schemes is often weak. This results in a lack of monitoring and evaluation of the system nationally.¹

• Currently most of the schemes only cover the core family with 2-3 children. The scheme will not cover extended family members in the household who could also be infected with TB. In the future, BPJS should cover other family members with, if necessary, an additional premium.

¹ This will continue unless the MOH is able to mandate that all the health providers contracted by health insurance schemes use the TB information system. While this has been done through the MOH MoUs with Jamsostek and PT. Askes it is not clear that it has worked completely and an evaluation would be worthwhile.
The present health insurance scheme motivates people to seek health care. Despite that, the general public has limited knowledge of TB and do not get a fast enough diagnosis.

**Recommendations**

Based on the findings these are the potential recommendations:

- Additional outpatient and inpatient TB claims data should be obtained from the schemes for further analysis.
- Since the quality of data is a concern, the NTP should develop a format for the data and analysis that it needs for BPJS and Jamkesda.
- To ensure that the DOTS requirements for TB drugs are met, an evaluation of the impact of the MOUs between health insurance scheme and the NTP would be worthwhile.
- The accreditation of TB providers should be accelerated especially in areas where few providers are currently accredited. BPJS should also identify and provide incentives to providers who treat TB according to standard by credentialing at the beginning of contract process. In addition, the NTP should provide lists of accredited TB providers to the insurance schemes for notification to members.
- The insurance schemes should notify the District TB Control Program Manager about TB cases treated at hospitals and by private providers to facilitate contact tracing and other case management requirements.
- Systems of referral, networking and information sharing will need to be established so that district offices and public health centres can carry out their public health functions, such as contact tracing. Clear guidelines for this should be prepared for each registered provider who is accredited to provide TB services.
- Reimbursement rates for TB services should be reviewed regularly to ensure providers are motivated to accept patients. Rates need to take into account that diagnosis and treatment of MDR-TB and extensively drug-resistant tuberculosis (XDR-TB) and co-morbidity of TB with HIV/AIDS and diabetes makes the issue of insurance coverage more complicated and costly. The NTP should develop separate coverage requirements for this and agree them with BPJS for future implementation.
- Consideration should be given to add elements of pay-for-performance with provider payment mechanisms into the insurance financing mechanisms to encourage the providers to assist with case finding, contact tracing, ensuring that cases diagnosed as active start treatment, following up on defaulters, ensuring patients are cured, and
ensuring that follow-up treatment is provided if they are not cured. Such a model could reward providers for meeting performance measures for quality and efficiency.

- The NTP should develop a set of regulatory and financing policy levers which will include the use of accreditation, approved drug lists and case reporting as well as the use of insurance which only reimburses for approved treatments and the provision of incentives to providers and patients to initiate and complete treatment.

- The MOH should discuss with other government bodies to find ways to mitigate the patient costs associated with TB and MDR-TB which are not covered by health insurance which could lead to default or not seeking treatment.

- The NTP will need to focus on groups of persons vulnerable to TB who will remain uncovered until 2019 under JKN. If the expansion of coverage to these groups is to be done through Jamkesda the government will need to ensure that sufficient funds are available.

- The NTP will also need to identify and support local governments who do not have a strong commitment to TB control. The NTP should advocate with all provinces and districts to budget adequately for TB control.

- The insurance schemes should be designed in a way to encourage patients to seek diagnosis and treatment first at the primary care level and to ensure that information on treatment provided elsewhere is fed to the health centre. The NTP should work with the BPJS task team to bring this about.

- TB services will be provided by both public and private sectors and financing will be mixed –central government, local government, health insurances, and user fees-. This, together, with the issues identified above make it vital that there be a comprehensive approach to the financing and delivery of TB services, with the process well-managed by the MOH at district and facility levels to ensure the TB control is effective. The NTP must develop and distribute clear guidelines explaining all roles and responsibilities.
1. INTRODUCTION

The TB challenges

Indonesia is a high burden country for Tuberculosis and MDR-TB according to the World Health Organization (WHO), with an estimated 500,000 new cases of TB annually and 175,000 attributable deaths. Tuberculosis is the second highest mortality rate among adults after cardiovascular disease and is considered the most deadly pathogen of all communicable diseases. The impact of TB on individuals, families and Indonesian society as a whole is significant, with an estimated economic burden of around for 2011 cases of US $2.0 billion.\(^2\)

The NTP’s goal is to sharply reduce the national burden of TB disease through universal access to quality diagnosis and patient-focus treatment.\(^3\) Its objectives are as follows:

- Quality DOTS service are scale up and improved
- TB/HIV, MDR-TB, and the needs of poor and other vulnerable groups are tackled.
- All public, community and private health providers are implementing International Standards for TB Care.
- Improve community and TB patient empowerment
- Strengthen the health system and TB control program management
- Strengthen the central and local government commitment for TB control program
- Improved research, development and utilization of strategic information

Financial sustainability

Great progress has been made in tackling TB over the last few years in Indonesia thanks to the commitment of the Government and financial assistance from donors, including the Global Fund for AIDS, TB and malaria (GFATM) and USAID. There is still, however, a need to continue to expand and improve TB control, for example in the area of MDR-TB detection and treatment. Any reductions in funding could undo all the good work that has taken place over the years and could reverse the progress towards the elimination of TB. Recognizing this fact and acknowledging expected reductions in GFATM funding, the Government of

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\(^3\) Indonesia National TB strategic plan 2010-14. Ministry of Health.
Indonesia has committed to increasing domestic financing. Indonesia is one of several countries in the region that are seeking ways to address this challenge.

**The role of insurance**

Increasingly, lower middle income countries have moved towards the adoption of health insurance models as a means to support sustainable financing for Universal Health Coverage (UHC) (Figure 1). While the primary goal of publically supported health insurance schemes is to increase access to care for vulnerable, marginalized populations they can also contribute to improvements in quality and efficiency (e.g. through cost control).

![Figure 1: Dimension of Universal Health Coverage](image)

The effective control of TB requires a complete and integrated package of services and the financing of those services must facilitate that integration. All the components (Box 1) must function well and must be seamlessly linked.

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Any broken links in the chain will result in problems in TB control. For example not carrying out effective contact tracing will result in delays in identifying new cases and not following up on defaulters will result in more cases of MDR-TB.

The overall relationship between the patients, insurance scheme, MOH/NTP and other players is shown in Figure 2.
While it is important that domestic financing be increased, it is, therefore, also important that the financing mechanisms support the functionality of all the above steps. The use of social health insurance can help to finance much of the TB program but it must be coordinated with budget funding so the TB program works optimally.

**Public insurance in Indonesia**

Government led, publically supported and/or centrally and locally managed insurance schemes have been in place in Indonesia for some years and together cover around 72% of the population (Figure 3).
The three existing national government schemes are:

1) Jamkesmas (*Jaminan Kesehatan Masyarakat*): national health insurance for the poor with around 76.4 million members (36.8%);
2) PT. Jamsostek (*Jaminan sosial tenaga kerja*): national health insurance for company employees with around 5.6 million members (2.3%);
3) PT. Askes (*Asuransi Kesehatan*): national health insurance for civil servant, pensioners and veterans with around 17.2 million members (7.2%).

A fourth scheme is Jamkesda (*Jaminan Kesehatan Daerah*) a government-funded scheme which operates at the district or province level and which covers around 16.79% of the population. This is called JKA (*Jaminan Kesehatan Aceh*) in Aceh, Jamkesda in West Java, KJS (Kartu Jakarta Sehat) in Jakarta. The benefit packages vary across the local governments depending on their capacity.

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Premiums for Jamsostek and PT. Askes are paid by the employer and employee, whereas premiums for Jamkesmas and Jamkesda are paid by the Government. Most of the Jamkesda schemes get their funds from government (APBD) allocations. There is no pooling system for Jamkesda, it is just an inline budgeting system under the local treasury. However, some have other funding sources, such as premiums and shared APBD I and II funds. For instance, the Jamkesda schemes in Purbalingga and Yogyakarta also collect premiums from their members.

The benefit packages for the four schemes are comprehensive and, thus, similar. However, the hospital accommodation benefit is lower for Jamkesda and Jamkesmas, which are schemes that cover the poor.

Provider payment methods vary across health insurance schemes. Jamsostek and PT. Askes use capitation at the primary health care level and fee-schedules at the hospital level. All public health insurances -Jamkesmas, Jamkesda, Jamsostek, and PT. Askes- reportedly, make payments for primary health services to District Health Offices (DHOs) using a capitation system. DHOs then pay the public health centres (Puskesmas) on a fee for service basis. Private primary care providers are paid directly on a capitation basis by the insurance schemes. For hospital reimbursements, Jamkesmas uses case-based reimbursement rates (INA-CBGs). Jamkesda schemes, reportedly, have different payment systems across the districts. Some reimburse providers using a fee for service payment system, some use case-based reimbursement rates, and some have mixed payment systems - using capitation for the primary care and fee-for-service for hospitals.

The three national schemes will be combined in early 2014 into a new scheme called Jaminan Kesehatan Nasional (JKN) which will be run by BPJS Kesehatan Jamkesda and will continue to operate independently for some time. The goals of the new program (JKN) are to:

- expand coverage to reach the whole population (estimated at 257 million) by the end of 2019 (Figure 4);
- the package of medical and non-medical benefits (class treatment) will be the same for all;
- the number and distribution of health care facilities (including personnel and equipment) will be sufficient to ensure that all residents can access their medical needs;
- at least 85% of beneficiaries are satisfied with BPJS services and health services;
- at least 80% of the health providers are satisfied with the BPJS payment rates.
Jamkesda will continue to operate alongside the JKN scheme to cover poor who are not registered in Jamkesmas, such as informal sector workers, and the plan is to align the premiums with the lowest JKN premium group and to have the same benefits package. It may be integrated into the national scheme after a few years but the plan for this is not yet determined.

Three provinces where the current public health schemes are well developed are being used to pilot certain aspects of the JKN scheme. These are the DKI Jakarta, Aceh and West Java provinces. Each pilot has a different purpose:

- In Jakarta they are piloting INA-CBGs as the provider payment mechanism and including in Jamkesda scheme;
- In Aceh they are piloting INA-CBGs as provider payment mechanism, preparing primary care and secondary health facilities, and membership integration;

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13 Our assessment did not seek to cover these specific pilots which were ongoing at the time of the assessment but rather to get a general overview of TB under social health insurance.
• In West Java they are piloting a referral system in 5 districts and testing the guidelines of 144 diagnoses for primary care services and medical equipment, and drugs and diagnostic tests that need to be provided by Health center.
2. OBJECTIVES

The main objective of this study is to examine the extent to which TB has been integrated into existing social health insurance schemes in Indonesia. Specific objectives were to examine the degree to which TB services are currently covered under Indonesia’s public health insurance schemes, assess the TB financing under health insurance, analyse TB care-seeking behavior across the different schemes and identify some of the challenges that exist and might need to be addressed in the national social health insurance. In the findings we pay special attention to aspects that could affect the TB program when the JKN is implemented.
3. METHODOLOGY

The TB CARE II Project developed a framework for evaluating TB services within national UHC systems (Figure 5) and we used the same framework for this study even though in Indonesia there are four social health insurance schemes.  

![Figure 5. Framework for evaluating TB services within social insurance systems](image)

The research set out to look at insurance for TB from two aspects. The first mirrors the objectives of Universal Health Coverage (UHC):

- 100% coverage (insurance or free care)
- Equitable geographic access to services
- No financial barriers
- Good quality of care
- Financial sustainability

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The methodology used to conduct the assessment involved two separate pieces of research:

- A review of TB claims data.
- A series of interviews with health managers in the 3 JKN pilot provinces, supplemented by information from some interviews conducted previously in other provinces.

**TB Claims Review**

The claims review was conducted by analyzing reports and other documents obtained from the three national insurance companies (PT. Askes, Jamkesmas and Jamsostek) and by gathering other information through interviews with senior managers from those companies. The information that was sought out was the numbers of TB services provided and the amounts reimbursed.

**TB service providers and insurance manager interviews**

Qualitative descriptive research methods were used. Methodology and data collection tool was adapted from a study carried out by TB CARE II. 15 There are 3 sources of information used of data collection using questionnaires, focus group discussions (FGD) and in-depth interviews (IDI). More details of the data collection tools employed are listed below.

1. **Questionnaires:** A questionnaire was developed using both close ended and open-ended questions with reference to the TB CARE II tools. As four key stakeholder groups were asked to complete the questionnaire, the questionnaire was developed into four variations, each with the same set of initial questions and additional questions relevant to the specific stakeholder. Questionnaires were filled in before focus group discussions began.

2. **Focus group discussions:** A focus group discussion (FGD) schedule was developed with a series of open ended questions adapted from the TB CARE II program to explore participants’ opinion of health insurance and the TB program in their province. The FGDs were conducted with a total of 11 participants in Aceh, 9 in Jakarta and 10 in West Java. Focus groups were held in private meeting rooms with 2 researchers present, and lasted between 90 minutes and 120 minutes.

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3. In Depth Interviews: In-depth Interviews (IDI) were conducted with participants when additional clarification was needed after they completed the questionnaire, or if they were unable to attend an FGD. One researcher was present at each IDI and key responses were transcribed during the session by the researcher. The IDIs lasted approximately 60 minutes each.

The persons interviewed from each province include the following:

- Insurance scheme managers (PT. Askes, PT. Jamsostek, Jamkesmas, Jamkesda)
- Provincial health managers
- District health managers
- Facility managers (Private Hospital, Public Hospital, Primary Health Care – Private, Primary Health Care - Public)
- Managers of community-based organization/ NGOs

Nine insurance managers (3 from Jakarta, 4 from Aceh and 2 from West Java) and fifteen health facility managers (7 from Jakarta, 5 from Aceh and 3 from West Java) completed the questionnaire. Five NGO managers (2 from Jakarta, 1 from Aceh and 2 from West Java) and nine TB managers both from district and province health office (3 from Jakarta, 5 from Aceh and 2 from West Java) also completed the questionnaire.

The questions asked covered four areas:

- The extent to which TB services are covered in health insurance schemes
- TB financing and reimbursement rates
- Care-seeking behavior across the different schemes, including patient access and costs (e.g. co-payments)
- Challenges and recommendations for TB coverage under health insurance schemes
4. FINDINGS

Review of claims data analysis

An analysis of insurance data for TB among members can provide interesting and useful information in terms of services provided, claiming practices and reimbursement rates. Such data can also be used for other types of analysis, such as risk factors.\(^\text{16}\) The analysis of the reports and documents from the three insurance companies (PT. Askes, Jamkesmas and Jamsostek) and the results of the interviews with senior managers are shown below.

**PT. Askes**

In 2012 the PT. Askes scheme, which covers civil servants, had a total membership of 17,274,520 persons representing 7.2% of the population. PT. Askes uses capitation for primary health care (PHC) services and there are, therefore, no claims data for these services. Hospital services are reimbursed on a fee-for-service basis and we were able to get total numbers of TB claims for 2009, 2010 and 2011, but not the total amounts paid (Table 1).

The data show that the numbers of hospital outpatient and inpatient claims increased by 10% and 16% (respectively) from 2009 to 2010, and by 6% and 30% (respectively) from 2010 to 2011. During the interviews staff mentioned that diagnoses are not always accurate – they are reportedly often based on patient referral diagnoses from the PHC level or admission records rather than discharge records. However, these changes are probably too big to result entirely from misdiagnosis.

Jamsostek

Jamsostek is the government scheme for private company employees and covers 2.3% (5,600,000 people) of the population (2012). The provider payment mechanisms used are capitation at the primary health care level and fee-for-service at the secondary care level. We were able to get data on the numbers of claims but not on the amounts paid. Jamsostek was able to provide PHC-level figures for TB services – these are not claims because they use capitation.

The numbers of PHC, hospital outpatient and inpatient TB claims increased in 2010 and 2011 (Table 2). The most significant increases were in hospital outpatient claims in 2011 (62%) which could represent a shift from PHC to hospital services since the number of PHC claims only increased by 3%, compared with 39% in the previous year. If the hospital outpatient claims represent referrals from PHC facilities the proportion of referrals is quite high – around 28% in 2009, 30% in 2010 and almost 50% in 2011.

### Table 1: PT. Askes - numbers of hospital tuberculosis claims for 2009-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Outpatient</th>
<th>Inpatient</th>
<th>% Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHC</td>
<td>Hospital OP</td>
<td>Hospital IP</td>
</tr>
<tr>
<td>2009</td>
<td>184,752</td>
<td>11,482</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>203,522</td>
<td>13,327</td>
<td>10%</td>
</tr>
<tr>
<td>2011</td>
<td>216,694</td>
<td>17,263</td>
<td>6%</td>
</tr>
</tbody>
</table>

### Table 2: Jamsostek - numbers of tuberculosis claims for 2009-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>PHC</th>
<th>Hospital OP</th>
<th>Hospital IP</th>
<th>% Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHC</td>
<td>Hospital OP</td>
<td>Hospital IP</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>21,985</td>
<td>5,999</td>
<td>1,323</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>26,962</td>
<td>8,321</td>
<td>1,777</td>
<td>23% 39% 34%</td>
</tr>
<tr>
<td>2011</td>
<td>27,835</td>
<td>13,505</td>
<td>2,216</td>
<td>3% 62% 25%</td>
</tr>
</tbody>
</table>
Jamkesmas

Jamkesmas is the government health insurance program for the poor and near-poor and the total membership is around 76.4 million people. Unfortunately its information system is apparently largely manual and it was not possible to get claims data for 2009 and 2010.

Jamkesmas was, however, able to provide total claims and payments figures for 2011 (Table 3). Provider payments are based on case-based groups (INA-CBGs) and the amounts and the rates do not reflect the real cost of treating TB in health facilities. The average amount reimbursed for TB was IDR 173,587 for an outpatient claim and IDR 2,733,774 for an inpatient claim. These figures may exclude the cost of TB drugs because the MOH case-mix figures do not include the vertical program drugs since they are provided free by the government.

<table>
<thead>
<tr>
<th>Department</th>
<th>Claims</th>
<th>Total Paid (IDR)</th>
<th>Average Paid per Claim (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital OP</td>
<td>101,491</td>
<td>17,617,541,181</td>
<td>173,587</td>
</tr>
<tr>
<td>Hospital IP</td>
<td>29,463</td>
<td>80,545,169,689</td>
<td>2,733,774</td>
</tr>
</tbody>
</table>

Table 3: Jamkesmas - numbers of claims and amounts paid for tuberculosis claims for 2011

Comparison of PT. Askes, Jamsostek and Jamkesmas TB Claims in Hospitals for 2011

The hospital TB claims data were compared across the schemes for 2011 (Jamkesmas data were only available for that year) (Table 4). We did not include PHC data which were only available for Jamkesmas.

The hospital tuberculosis claims history is significantly different across the three schemes. The average number of hospital outpatient claims paid was 13.3 per 10,000 members for Jamkesmas, compared with 26.1 for Jamsostek and 110.8 for PT. Askes. Inpatient claims follow a similar pattern with 3.86 claims per 10,000 members for Jamkesmas, 4.28 for Jamsostek and 8.82 for PT. Askes. These differences are surprising since one might have expected Jamsostek and PT. Askes claims to be similar since their members are company employees and civil servants, and one would have expected that Jamkesmas members would have had more TB claims since their members are the poor and near poor.
The Indonesian treatment algorithm used in a study of service costs\textsuperscript{17} is that an average of 10% of TB patients will require an average inpatient stay of 14 days and patients will make a minimum of 6 outpatient visits, ideally at the PHC level. Assuming 2 additional visits for diagnosis before treatment and 1 after treatment completion one might expect a total of around 10 outpatient visits. Assuming 10% of patients are admitted that would in a ratio of 100 outpatient visits to 1 inpatient admission.

The actual ratio of hospital OP claims to IP claims is interesting with PT. Askes much higher than the other two schemes with 12.6 compared with 6.1 and 3.4. This could indicate that PT. Askes patients are using hospital outpatient services more than primary health care services. In terms of Jamsostek, if we add PHC visits to hospital outpatient visits, the ratio of outpatient claims to inpatient claims rises to 18.

In the same service costs study the national incidence rate and case notification rates for TB were estimated at 187 and 136 per 100,000, respectively, in 2011. Based on the total membership of the three schemes of 111.7 million, and assuming that the incidence and case notification rates are the same for the insured population as for the general population, we would expect to have a total of 151,907 TB cases treated. Assuming 10% of new cases are admitted as inpatients, we would expect a total of 15,907 inpatient claims, which is much less than the actual total number of 48,942, which only covers 3 of the 4 schemes. There are several reasons why these figures may differ, including an underestimate of admissions, diagnosis reporting errors and different ways of reporting claims, but the size of the difference indicates that further analysis would be useful.

Since PT. Askes and Jamkesmas did not report PHC utilization for TB, it is possible that the numbers of services at that level compensated to some degree for the variations in hospital outpatient claims. However, if the recommended TB algorithm is followed by the providers, we would expect to see similar patterns across the 3 schemes. Differences could also, relate to different claiming processes across the 3 schemes.

<table>
<thead>
<tr>
<th></th>
<th>TB claims 2011</th>
<th>Hospital outpatient claims</th>
<th>Hospital inpatient claims</th>
<th>Members</th>
<th>Average hospital outpatient claims per 10,000 members</th>
<th>Average hospital inpatient claims per 10,000 members</th>
<th>Ratio of hospital outpatient to inpatient claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamsostek</td>
<td>13,505</td>
<td>2,216</td>
<td>5,183,479</td>
<td>26.1</td>
<td>4.28</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>PT. Askes</td>
<td>216,694</td>
<td>17,263</td>
<td>19,564,265</td>
<td>110.8</td>
<td>8.82</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Jamkesmas</td>
<td>101,491</td>
<td>29,463</td>
<td>76,400,000</td>
<td>13.3</td>
<td>3.86</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>TOTAL CLAIMS</td>
<td>331,690</td>
<td>48,942</td>
<td>101,147,744</td>
<td>13.3</td>
<td>3.86</td>
<td>3.4</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. PT. Askes, Jamsostek and Jamkesmas hospital claims paid for tuberculosis in 2011

Based on the above findings it is clear that it is possible to conduct useful analysis of TB claims which will help to plan and monitor important information on TB financing through insurance. There is a need, however, to improve the quality and collection of data, in particular:

- Jamkesda data should be collected at the national level so that TB claims can be better analysed and compared across districts.
- The amounts paid should be collected and reported as well as the numbers of claims.
- The diagnoses of TB may not always be accurately recorded and reported which will result in inaccurate claims and reimbursements data and will limit the usefulness of data analysis.
TB coverage under health insurance

Introduction

This section of the report synthesizes the findings of the study conducted in 2013 in the three provinces being used to pilot aspects of the JKN scheme- Jakarta, Aceh and West Java. Additional data and the findings from some preliminary research conducted in other provinces in 2012 are also included where relevant.

It is worth noting that the case notification rate is much lower in Aceh and West Java than at the National level, while the rate in Jakarta is much higher. The total numbers of cases is also much lower in Aceh, since the population is smaller than the other two provinces (Table 5). If the incidence/prevalence of TB is similar in Aceh to the national level then there are many undetected cases in Aceh.

<table>
<thead>
<tr>
<th>Province/national</th>
<th>Population</th>
<th>Case notification rate / 100,000 population</th>
<th>New smear positive / 100.000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jakarta</td>
<td>9,604,329</td>
<td>270.1</td>
<td>89.9</td>
</tr>
<tr>
<td>Aceh</td>
<td>4,378,649</td>
<td>100.0</td>
<td>82.5</td>
</tr>
<tr>
<td>West Java</td>
<td>42,167,705</td>
<td>149.5</td>
<td>82.2</td>
</tr>
<tr>
<td>National</td>
<td>235,956,612</td>
<td>136.2</td>
<td>83.8</td>
</tr>
</tbody>
</table>

Table 5. CNR and total cases of 3 provinces and national in 2011

Population coverage and scheme membership

At the national level it is estimated that 151 million (63.2%) out of 239.7 million people were covered in 2012, leaving 88.1 million (36.8%) uninsured. According to socio-economic survey in 2011, Aceh, West Java, and Jakarta provinces covered 70%, 37%, and 34% of their populations respectively. Reportedly, coverage is available for all people in Aceh so it is

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18 NTP secondary data. Case Notification Rate in Indonesia 2011.
likely that the 30% who said they did not have insurance in the survey were not aware that they could get it.

<table>
<thead>
<tr>
<th></th>
<th>Jamkesmas &amp; Jamkesda</th>
<th>PT. Askes</th>
<th>Jamsostek</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceh</td>
<td>2,257,576 (55%)</td>
<td>529,116 (13%)</td>
<td>98,759 (2%)</td>
<td>1,237,747 (30%)</td>
</tr>
<tr>
<td>West Java</td>
<td>8,086,372 (19%)</td>
<td>3,238,366 (7%)</td>
<td>4,653,983 (11%)</td>
<td>27,270,579 (63%)</td>
</tr>
<tr>
<td>DKI Jakarta</td>
<td>236,235 (3%)</td>
<td>884,890 (10%)</td>
<td>1,981,485 (22%)</td>
<td>5,919,490 (66%)</td>
</tr>
</tbody>
</table>

Table 6: Health insurance coverage in 3 provinces (2011)

However, actually the Aceh and DKI Jakarta governments are covering all their citizens since 2010 and 2012 respectively – in both cases persons who are not registered in one of the national schemes (e.g. people in the non-formal sector) can now use Jamkesda-. In West Java the policy has not yet changed and so Jamkesda only covers poor who are not registered with Jamkesmas and does not cover the non-formal sector.

Information from the interviews indicated that the majority of health facility managers in Aceh stated that most TB patients have insurance. It was also stated that the insurance schemes only cover a core family with three children and do not cover other children or relatives. They also do not cover migrants, non-citizens and/or floating populations, marginalized and/or hard to reach populations. In the future with JKN scheme, additional premium will be needed to cover families with more than 3 children and extended families.

The managers interviewed also indicated that Jamsostek membership is very dynamic, given that members rely on their employers to be covered by this insurance. If they commence their TB treatment and then lose their job they are no longer covered by the same insurance scheme. This can have a major impact since interruptions in treatment can lead to MDR-TB. Also, Jamsostek sometimes stops covering services to companies due to late payment of premiums and then patients have to pay out-of-pocket. And sometimes companies do not, or are slow to, register employees. Extending coverage to the informal sector and to formal sector employees who are not able to get access or who lose benefits challenges.

Access to TB services

Health insurance schemes can contract with public and private hospitals, general practitioners, clinics, laboratories, pharmacies, and other health facilities and this will
continue under BPJS (Act No. 40/ 2004). The new national health insurance carrier (BPJS) will register members with specific health providers based on recommendation of district health office (Presidential Decree No. 12/2013) and health providers that do not have ancillary services will be required to develop networks to ensure the availability of drugs, medical supplies, and lab and other examinations.

Private health sector providers already play an important role in providing health services under insurance, including TB services. Based on the interviews, however, there are different opinions as to their importance. The NGO managers interviewed in the 3 provinces all agreed that most people access TB care from public primary care facilities. District health managers, however, thought that most patients accessed TB care from private primary care facilities.

Based on the interviews some managers in Aceh and West Java believe that only a limited number of providers, especially in the private sector, can treat TB according to required standards. Currently, for example, only 26% of 67 health facilities are believed to be able to provide TB services in West Java. One private hospital manager in Aceh stated that, "We are challenged with a lack of ICU rooms for TB patients. Currently we only have 4 beds. We do not have special designed clinics for TB patients due to a lack of space and trained human resources, including the specialists."

**TB financing**

Central and local government currently provides most of the resources for TB diagnostic, treatment services, and outreach activities at public facilities and the Global Fund helps fund PMDT services. Health insurance and out-of-pocket payments also play a role. Interestingly, the managers interviewed in the pilot provinces largely believed that the TB program is funded mainly by international donors. As one local district health manager said, “Local government does allocate budget for TB but the large portion comes from Global Fund” (Dinkes, Provinsi Aceh).

However, the commitment of local governments to funding TB is variable. For example, 5 of 26 district governments in West Java do not budget anything for TB control. On the other hand some local government units in Jakarta have a high commitment to TB control program and cover TB operational costs at the primary health care level.
**TB benefits under insurance**

Generally all of the insurance schemes benefit packages provide comprehensive cover for outpatient and inpatient TB services at both primary and hospital levels. All the insurance managers in the 3 provinces agreed that TB is covered (including pulmonary, extra-pulmonary and MDR TB/ XDR TB). TB drugs are also covered even though they are provided by the government for free so hospitals can purchase TB drugs based on the insurance scheme’s formulary. However, MDR-TB drugs are not in any of the schemes formularies.

The interviewed managers also agreed that all TB diagnostic services (sputum microscopic, chest x-ray, DST and TST) are covered as well as all treatment services except IPT (preventive therapy). However, at the primary health care level, PT. Askes only covers routine blood, stool and urine tests. Patients are referred to a hospital if there is a need for more advanced diagnostic tests such as Anti TB/ IgG TB, PCR TB, TB resistance tests and these are reimbursed based on a fee schedule (Annex 5).

Jamkesda packages, however, vary from place to place across Indonesia and do not always cover all TB services. In West Java, for example, Jamkesda does not cover TB-HIV or MDR-TB costs. Information from other provinces illustrates further differences among Jamkesda schemes. For example, some only cover services up to the district level, while some others cover up to the provincial level and some up to the national level.

Presently almost all the Jamkesda schemes cover diagnostic tests for TB. However, in Yogyakarta province, they are only covered if they are based on medical indications and in Bangka district only sputum tests are covered. X-ray examinations and Mantoux tests are not covered. TB diagnosis is not covered in Kutai Kartanegara District and Balikpapan City because they are considered to be covered by the CDC section of the District health office.

None of the health insurance schemes in the three provinces cover patient or companion costs associated with TB, such as transportation and loss of income. In some other provinces, however, Jamkesda cover the transport costs of family members who accompany patients when they are referred (all patients, not only TB patients). In Aceh most of the district health managers said that social support services (such as transport for referral) were covered by the insurance scheme but the two other provinces said they were not.
TB insurance reimbursement and provider payment mechanism

Even though almost all TB services are funded by the government and donors, the average cost of a TB patient visit is considered high and increasing by PT. Askes (IDR 117,802 in 2011 and IDR 151,634 in 2012), and by Jamkesda (IDR 195,531 in 2011 and 200,233 IDR in 2012). However, TB is not considered a high cost disease by the health insurance managers.

Under the new national scheme, capitation will continue to be used as the provider payment mechanism at primary health care facilities. Case-based groups (INA-CBGs) will be used at hospitals as is used presently by Jamkesmas. However, it is perceived that reimbursement rate of TB services under INA-CBGs are low and there is concern that providers may not cover their costs. Tariffs are expected to vary widely by region and class of hospital and it seems that there is no separate rate for PMDT (Tables 8).

<table>
<thead>
<tr>
<th>Inpatient Diagnoses</th>
<th>Class C Hospital</th>
<th>Class B Regular Hospital</th>
<th>Class B Teaching Hospital</th>
<th>Class A Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB infection and mild respiratory system bacterial</td>
<td>1.724</td>
<td>2.189</td>
<td>2.666</td>
<td>4.215</td>
</tr>
<tr>
<td>TB infection and moderate respiratory system bacterial</td>
<td>2.472</td>
<td>4.186.</td>
<td>4.186</td>
<td>5.620</td>
</tr>
<tr>
<td>TB infection and severe respiratory system bacterial</td>
<td>2.619</td>
<td>4.435</td>
<td>4.435</td>
<td>6.323</td>
</tr>
</tbody>
</table>

Table 7. INA-CBGs for Inpatient Diagnoses for TB in thousand rupiah

Outpatient TB cases that are confirmed bacteriologically and histologically, and tuberculosis of other specified organs are grouped under “other severe chronic diseases” (Table 9). The

19 In 2011 and 2012 PT. Askes in Aceh reported paying 1,259 and 1,310 TB claims with a total cost of IDR 148 million and IDR 198 million, respectively. In the same years JKA reported paying 2,883 and 2,078 TB claims with a total cost of IDR 563 million and IDR 416 million.

20 A recent study noted that, while there has been broad experience with contracting public and private providers through publicly funded schemes, the contracting mechanisms do not always make strategic use of the potential of reimbursement mechanisms to improve quality and efficiency. The DRG reimbursement system of Jamkesmas, for example, created strong disincentives for providers to deliver maternal health services. See Inke Mathauer and Friedrich Wittenbecher. DRG-based payment systems in low- and middle-income countries: Implementation experiences and challenges. WHO 2012.
rest of the outpatient tuberculosis cases in the (International Classification of diseases (ICD) code are grouped as “other mild chronic disease”.

<table>
<thead>
<tr>
<th>Outpatient Diagnoses</th>
<th>Class C/D Hospital</th>
<th>Cass B non-teaching hospital</th>
<th>Class B Teaching Hospital</th>
<th>CLASS A Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other mild chronic diseases</td>
<td>149</td>
<td>154</td>
<td>283</td>
<td>353</td>
</tr>
<tr>
<td>Other severe chronic diseases</td>
<td>182</td>
<td>189</td>
<td>347</td>
<td>432</td>
</tr>
</tbody>
</table>

Table 8. INA-CBGs outpatient diagnoses for TB in thousand rupiah

Since case-based groups will be used, it will be important to know the components are considered as “other severe chronic diseases” are considered as “other severe chronic diseases” that make up the rates as there is a potential for duplication with TB drugs and diagnostic tests supplies that are already provided by the government.

In the interviews concerns were also expressed about the use of capitation for TB. In particular there is concern that TB drugs are too expensive to be part of capitation and private clinics will prefer to refer TB cases to hospitals. MDR-TB drugs would be even more expensive. Fee-for-service would better motivate the providers to ensure TB treatment adherence. Facility managers in Jakarta who did not agree with capitation said “Applying capitation for TB is not appropriate, if possible better to use fee-for-service. Patient will visit routinely over 6 months and the package of TB medication is already quite expensive, Even more expensive for category 2 drugs”.

Quality of TB services

Several of the managers interviewed were concerned that not all hospitals are able to provide DOTS according to required standards. For example, some NGO Managers in West Java stated, "There are hospitals who do it well, there are some who just got started and there are some who just do not do it seriously... the problem is that Jamkesmas and

21 “Untuk TB kalau dimasukkan cap itasi saya bilang nggak pas, ya dia kalau bisa adalah fee for service jadi karena dia kan akan ber kunjung dalam kurun waktu 6 bulan dan dia akan datang secara rutin gitu, jadi mungkin akan bentuk seperti apa pembiayaan nya karena terus terang obat TB 1 paket itu pembiayaan nya sudah lumayan jadi kalau kategori 2 juga mahal.”
Jamkesda managers sometimes choose hospitals which have not implemented DOTS program as TB referral hospitals” (NGOs, West Java).

There is also concern that PT. Askes does not do enough to encourage DOTS as a treatment strategy because it allows the use of drugs that are purchased by the hospital based on PT. Askes drugs formulary. Patients that are diagnosed and treated by specialists at the hospital level are not treated according to required standards. PT. Askes does not, however, cover MDR-TB drugs.

Another issue that was also important is treatment adherence. Health centers sometimes find it hard to trace TB patients to monitor treatment if their details – address and phone number - are not entered correctly in the records. The health insurance schemes could also play an important role since PT. Askes and Jamsostek have Moues with the NTP for DOTS provision.

Several managers in the pilot provinces indicated that it is essential that providers should be accredited for TB DOTS before being allowed to provide services and be contracted by health insurance schemes. There is currently no requirement for this.

In the absence of this requirement the NTP has worked with the MOH to implement nationwide with Jamsostek and PT. Askes (in 2010 and 2012, respectively) for DOTS services. The objectives of the MoUs were to encourage the use of DOTS to improve case finding and treatment. Under the MOU, the MoH is required to provide: 1) guidelines and regulations for TB treatment through DOTS; 2) training in DOTS implementation; 3) ensure the availability of drugs and lab test supplies; and 4) develop the health services network for TB with DOTS strategy. JAMSOSTEK is required to: 1) provide TB services using DOTS; 2) record and report its TB activities; 3) to provide TB drugs and lab tests; and 4) participate in planning and monitoring and evaluation at national and local levels. 22

The MoU between NTP and Jamsostek is not, however, considered to be functioning optimally yet. In the interviews some Jamsostek managers said that there is still a lack of knowledge and capability to deliver DOTS and also poor TB diagnostic services at private

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primary health care centres contracted by Jamsostek. Another study showed that Jamsostek health workers knowledge on TB increased sharply after receiving training on TB in 2009 and reduced significantly after 3 years. Furthermore, among all of the topics tested, knowledge of TB treatment and control was very low.

They also said that the recording of TB patient data history and tracing patients is weak under the Jamsostek scheme. There are still many patients who discontinue their medications and then do not disclose that when they start treatment again. Sometimes they discontinue their medication before they get better – which may cause MDR TB or other complications.

**TB health seeking behaviors**

According to the manager interviews, TB patients that have Jamsostek or PT. Askes schemes tend to go to hospitals for diagnostic and treatment even though TB treatment can be carried out at family physicians at the primary health care level. This is because insured patients believe that health centers are overcrowded and that they deserve to get specialist services at the hospital level because they provide better services. In addition, diagnosis with TB sputum microscopy at the primary care level is not covered under PT. Askes scheme. Bypassing the health centre causes problems because they do not then have information to do contact tracing or to track patients (which hospitals cannot do).

As an NGO manager said in West Java "Most TB patients that we supervise mostly go to Muhammadiyah hospital and Asri Husada private clinic, for they already have institutional partnership for TB treatments. The reason we do not refer our TB patients to Puskesmas because Puskesmas have limited TB programs and we also think that they do not meet qualified human resources".

The interviews also highlighted a lack of public knowledge about free and insured services. All NGO managers in the three provinces perceived that people sometimes do not access TB services because they did not know that diagnostic and treatment services are free at public
facilities. In addition, since drugs are free and user fees for registration are very low at public facilities, patients often do not use their health insurance due to frustration with the insurance claiming process – e.g. having to provide a copy of their IDs. However, the interviewees recognize that health insurance plays an important part to fill the gap of services that are not covered by government, especially at hospital and private sectors.

The importance of high insurance coverage was illustrated in comments from Aceh where the managers said that people have become more aware and demanding of health services. And, in some instances, they have been identified as TB suspects when they come in for other health problems.

**Economic access to services**

Based on the interviews in the three pilot provinces there do not appear to be any significant official out-of-pocket charges for inpatient or outpatient care other than a very low registration fee. Information from sources in other provinces, however, indicate that PT. Askes allows providers to collect co-payments with a maximum of 10,000 IDR per visit. And the same sources indicated that, although some Jamkesda schemes do not have co-payment systems, some of them have benefit limits and patients have to pay the balance out-of-pocket if the provider bill exceeds the limits or superior accommodation is used. A comment from one manager about co-payment from the in-depth interview sessions is shown below:

"At the Cempaka Putih Islamic hospital, the TB patients are not charged for their medication services, they just need to pay the patients ID card for 10,000 rupiahs." (Private hospital, DKI Jakarta). “The procedure of free TB services is started with patients registration, and if they are positive FM, they will be referred to the Pulmonary clinic, if the patient is detected as a suspect, he will be given the sputum test” (Puskesmas, DKI Jakarta).

Even though there few or no financial barriers in health facilities, the patient costs associated with TB are not covered by health insurance, such as travel, food and accommodation costs and loss of income of individual and family members. This can result

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25 This is especially true for MDR-TB where patient costs can be very high. A separate study on these costs is being conducted by TB CARE I in Indonesia.
in non-seeking of treatment, defaulting, and can have a catastrophic effect on a household’s financial situation.

**Coordination between TB program and health insurance schemes**

Based on the pilot province interviews, it appears that coordination between the TB Control Program and the insurance schemes is often weak. The insurance schemes have some information on TB cases which are not reported by providers (e.g. private hospitals of clinics). The provision of these data would improve TB control and the monitoring and evaluation of the system nationally.

According to health facility managers in the three pilot provinces, every health insurance scheme has its own system. The facility managers report to the health insurance companies as part of claims process every month but the insurance schemes do not share the information on TB cases with the MOH. TB program managers, however, need to go to either health facilities or health insurance schemes to get TB patient information. Difficulty in getting information poses a significant challenge for the follow up of treatment.

Other information indicates that information on TB suspects that are diagnosed by private clinics can only be obtained at health facilities level. However, there is lack of feedback to the clinics from the hospital and health centers that carry out diagnosis and treatment, thus making difficult for the clinic to follow up the cases.26

Coordination is also a challenge when the roles of the government, community organizations, insurance and the private sector in the TB program are unclear. As one District Health Office manager said in west Java, “Drugs are overstocked because no proper coordination has been established between central and local government in drug procurement. The insurance schemes do not provide any reports to the TB Program on TB patient claims.” (DHO, West Java).

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5. SUMMARY OF FINDINGS

The analysis of national claims data was quite limited due to difficulty in obtaining data. Nevertheless it produced some interesting findings that are worthy of investigation:

- The number of TB inpatient claims by PT. Askes and Jamsostek members rose substantially from 2009 to 2010 and again from 2010 to 2011, especially for inpatient services.
- The Jamsostek TB visits at the PHC level increased by only 3% from 2010 to 2011, which was much less than the increase in hospital outpatient claims (62%). This could indicate a move away from PHC to hospital outpatient care, which may be less cost-effective and could result in physical access barriers.
- Significant differences in ratios of outpatient to inpatient claims across the 3 national schemes indicate possible differences in treatment algorithms by the providers, which may be influenced by the types of insurance contracts. The numbers of inpatient claims appear to be higher than expected based on the national incidence and treatment rates, which may indicate that more patients are being admitted than necessary.

The analysis of managers’ views in the three provinces also produced some interesting findings which are shown in Table 9. When reviewing them it is worth noting that the insurance coverage is reportedly quite high in Jakarta and Aceh but still low in West Java, with informal sector and some other groups are not yet covered.

On the positive side, there was a sense that accreditation of providers has resulted in improvements in the quality of TB services and that the expansion of coverage has increased the likelihood of earlier detection of TB.

The most important challenges can be summarized as follows:

- A degree of fragmentation exists across the schemes, with differences in benefit packages and co-payments, for example.
- A lack of coverage for groups of people, such as informal sector workers, and also for some family members of insured persons.
- Persons losing their membership of Jamsostek and are sometimes unable to access other schemes quickly, if at all.
- A lack of availability of providers able to provide quality TB services to national standards and the issue of some providers not following DOTS.
- Concerns that insurance payments are not sufficient to cover costs.
- Insured patients preferring to bypass primary care providers to go directly to hospitals.

Poor coordination and information sharing by the insurance schemes with local TB managers.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Positive findings</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population coverage</td>
<td>• Jakarta and Aceh already cover a high portion of the population thus reducing financial barrier to access to health services.</td>
<td>• Health insurance schemes only cover the core family with 2-3 children.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In West Java the informal sector are not all covered as Jamkesda only covers poor people not covered by Jamkesmas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Informal sector workers have difficulty finding coverage as none of the schemes cover them unless Jamkesda has been expanded.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Persons not registered by their companies with Jamsostek or who lose their jobs have to pay out-of-pocket for services that are not free.</td>
</tr>
<tr>
<td>TB in the benefits package</td>
<td>All TB services are covered under the 3 national schemes</td>
<td>• Some TB services are not covered under some Jamkesda schemes, for example TB-HIV and MDR-TB in West Java and X-rays in some districts.</td>
</tr>
<tr>
<td>Access to services</td>
<td>Accreditation has resulted in service quality improvements.</td>
<td>• Limited availability of providers, especially private sector, who can treat TB according to national protocols.</td>
</tr>
<tr>
<td>Services quality</td>
<td></td>
<td>• Perceived lack of capacity of diagnosis at some health providers that are contracted by health insurance schemes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DOTS treatment is not always followed for PT. Askes and Jamsostek patients because the hospital can choose non-approved drug.</td>
</tr>
<tr>
<td>Reimbursement</td>
<td></td>
<td>• Reimbursement rates are considered too low for the hospitals. This could lead to low quality of TB care, a tendency to refer patients, and unwillingness to accept insured patients.</td>
</tr>
<tr>
<td>Additional health service</td>
<td></td>
<td>• Health providers need to improve their knowledge of TB services.</td>
</tr>
<tr>
<td>requirements</td>
<td></td>
<td>• Need to expand lab services for TB that meet TB standards.</td>
</tr>
<tr>
<td>Health seeking behaviors</td>
<td>• Health insurance is increasing</td>
<td>• Public lack of awareness and knowledge about TB service coverage and accreditation.</td>
</tr>
</tbody>
</table>
### Table 9. Summary of research findings in pilot provinces

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Positive findings</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>motivation to seek health care in Aceh</td>
<td></td>
<td>• Most TB patients with PT. Askes and Jamsostek prefer to go directly to hospitals because of long waiting times at health centres and because they believe hospital care is better. Diagnosis is not covered at the primary health care level under PT. Askes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Patient costs such as transport and loss of income are not covered.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Members who go to health centres prefer not to claim because user fees are low and the claiming is tedious.</td>
</tr>
<tr>
<td>Coordination</td>
<td></td>
<td>• Lack of coordination with TB program, improved data sharing is needed; insurance schemes are fragmented and decentralized;</td>
</tr>
<tr>
<td>Linkage with private sector</td>
<td>Services are covered at private health providers</td>
<td>• Limited private health facilities with good quality TB services.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Limited diagnostic capacity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Limited collaboration with health insurance.</td>
</tr>
<tr>
<td>Financing</td>
<td></td>
<td>• Fragmented and unclear funding of TB services.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Some districts do not budget anything for TB control.</td>
</tr>
</tbody>
</table>
6. DISCUSSION AND RECOMMENDATIONS

Although the analysis of national claims was limited due to lack of data it produced some interesting findings. These are the low increase in PHC TB services compared with inpatient claims for Jamsostek; significant differences in ratios of outpatient to inpatient claims across the 3 national schemes; and higher numbers of inpatient claims than expected based on the national incidence and treatment rates. It is recommended that additional data be obtained from the schemes and further analysis be conducted.

It also appears that there is a need to improve the quality and collection of data. Assuming that the BPJS will have one information system, then some of the challenges should disappear. However, if Jamkesda continues to have separate local information systems then it will be important for these data to be collected at the national level so that TB claims can be better analysed and compared across the nation, provinces and districts. Whatever the new system is it will be important that the amounts paid are reported as well as the numbers of claims and there will be a need to improve recording and reporting of diagnoses so that TB is correctly identified in the claims records. It is also recommended that the NTP develop a format for the data and analysis that it needs from BPJS and Jamkesda.

Some of the fragmentation and coverage challenges identified in the provincial surveys should be resolved by the integration of the three national schemes. However, there is still likely to be fragmentation between the new scheme and Jamkesda. And with the decentralized nature of Jamkesda, it will take time for the schemes to achieve full coverage of the population.

From the viewpoint of TB case detection and case management there are a number of issues that may not be resolved by the creation of the JKN scheme, at least in the short term. These issues and some recommended solutions are set out below.

• TB patients may receive poor quality services because some contracted providers are not qualified in TB diagnosis and treatment.27 Also PT. Askes and Jamsostek have

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27 This issue has been emphasized by the Joint Learning Network in 2012 which stated that “There is also a lack of enforcement of the many existing standards in Indonesia (e.g., clinical treatment standards, hospital standards, standard drug formularies). Neither government officials nor professional associations have really
their own drugs formularies and sometimes prescribe TB drugs which are not provided under DOTS. Providers should only be paid for services if they are accredited TB diagnosis and treatment centres and if their services follow the national TB treatment guidelines, including the types of drugs and tests that they cover. The MOH may need to have MOUs with both BPJS and Jamkesda to ensure that DOTS strategies are followed. An evaluation of the success of the current MOUs with Jamsostek and PT. Askes will be worthwhile.

- There are to be insufficient qualified TB service providers in some parts of the country which means that suspects and patients may have difficulty accessing good quality services or may choose poor quality providers. In addition a member who is registered with a primary care provider who is not accredited for TB services will have to refer TB patients to an accredited provider. The accreditation of TB providers should be accelerated especially in areas where few providers are currently accredited. BPJS should also identify and incentivize providers who treat TB according to standard by credentialing at the beginning of contract process.

- Persons with TB lack information on which providers are accredited for TB services. The NTP should provide lists of accredited TB providers to the insurance schemes who should provide them to all members routinely and to any members whose beneficiaries are diagnosed with TB.

- PT. Askes and Jamsostek allow patients to go directly to hospitals and TB patients often do this because they prefer to be diagnosed by specialists at the hospitals because they believe public primary care facilities are overcrowded and hospital care is better. The BPJS should have disincentives for by-passing the PHC level and if this does happen for TB cases the hospitals must follow DOTS and must make sure that the TB control program manager/ wasor at DHO are notified so contact tracing and other case management requirements are met by PHC.

- District TB Officers are not always informed by all providers of TB patients detected or under treatment and cannot ensure that case detection (contact tracing) and case management are conducted well. BPJS and Jamkesda should provide the District TB Officers each month of all claims paid related to TB patient who are diagnosed and/or treated (including through capitation).

addressed how to ensure more rigorous clinical standards of treatment.”
http://www.jointlearningnetwork.org/content/indonesia
• The INA-CBG provider payment rates proposed for TB may not be sufficient to cover the costs of providing services. MDR-TB does not have a separate rate and if the INA-CBG is used for TB the payment will be much less than the cost. The rates will need to take into account the MOH policy and plans for providing free TB drugs. The rates will have to be reviewed to make sure they are adequate, and perceived by providers as adequate, if providers are to accept patients.

• Patient costs associated with TB and MDR-TB, such as transport and loss of income, are not covered by health insurance. These costs can result in patients not seeking treatment or defaulting which increases the TB burden. They can also have a catastrophic impact on the economy of a family, especially in the case of MDR-TB. The MOH should discuss with other government bodies to find ways to mitigate these costs.

• Since it will take some time to expand coverage to the whole population, there will remain groups of people, such as some formal sector workers, informal sector workers and migrants, in different parts of the country, who will remain uncovered until 2019. The NTP will need to focus on these groups who will remain among the most vulnerable from the TB perspective. The NTP will also need to identify and support local governments who do not have a strong commitment to TB control. If the expansion of coverage to these groups is to be done through Jamkesda the government will need to ensure that sufficient funds are available.

• From a public health perspective it is essential that a streamlined process be in place for all elements of the TB program (Box 1). The management of this process is best done at the public health centre, which needs the staffing and resources for this. The insurance schemes should be designed in a way to encourage patients to seek diagnosis and treatment first at the primary care level and to ensure that information on treatment provided elsewhere is fed to the health centre. The NTP should work with the BPJS task team to bring this about.

• The role of private primary care providers in case detection and management is not currently clear and they do not all have the ability to carry out the full set of functions as a public health centre. Under a capitation scheme, a private primary care provider should carry out prevention and promotion, but this does not always happen in practice. Contact tracing is not likely to be a high priority for a private provider except for the immediate family of the patient who are also registered. If a patient chooses a private provider there will need to be an established system of referral and networking and information will need to be fed to the public health centre so that aspects such as contact tracing can be carried out. Clear guidelines
should be prepared for each registered provider who is accredited to provide TB services.

- Due to concerns about the affordability of TB services under insurance and concerns by the MOH that disease control may be better financed through government budgets, it is likely that the domestic financing of TB services will continue to be mixed – with the key elements, such as the provision of drugs, funded by the MOH and some elements partly financed through insurance. This, together, with the issues identified above make it vital that there be a comprehensive approach to the financing and delivery of services, with the process well-managed by the MOH at the district and facility levels to ensure the TB control is effective.

- Some districts do not have TB budgets which means that they may not have funding for program elements that insurance may not cover, such as contact tracing. The NTP should advocate to provinces and district governments to budget adequately for TB control and empower community health workers and local government units at the village level to support TB control.

- Merely paying for tests and treatment will not be sufficient to ensure that TB control is effective if it does not take into account key case detection and management elements. Payments need to be in place for case finding, contact tracing, making sure cases diagnosed as active start treatment, following up on defaulters, ensuring patients are cured, and ensuring that follow-up treatment is provided if they are not cured. Consideration should be given to add elements of pay-for-performance into the insurance financing. Such a model might reward providers for meeting certain performance measures for quality and efficiency. In China, for example, pay-for-performance is used with capitation for village and township TB services, and pay-for-performance global budget plus pay for performance for county hospital services to improve in specific outcomes and increased efficiency. Note, however, that this will not result in cost savings due to added administrative requirements but it could result in greater cost effectiveness.

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28 This can also be done through the government budget, if allowed. Alternatives could be CSR or special taxes, such as on tobacco.

• There is not yet a comprehensive and integrated set of policy levers that can maximize the performance and impact of TB control. The NTP should develop a set of regulatory and financing policy levers which will include the use of accreditation, approved drug lists and case reporting as well as the use of insurance which only reimburses for approved treatments and incentives to providers and patients to initiate and complete treatment.

• The diagnosis and treatment of MDR-TB and XDR-TB and co-morbidity of TB with HIV/AIDS and with diabetes makes the issue of insurance coverage more complicated. The NTP should develop separate coverage requirements for this and agree them with BPJS for future implementation.

7. LIMITATIONS

There are limitations to this study and the findings presented. The sample size was small and also relatively homogenous and therefore the results may not be representational of the current situation in the three provinces but rather reflect the views of those involved in the study. The sample was also not random, but rather a convenience-based sample; only managers who were available to be involved in the study were included, and those that were not involved may differ in their knowledge, attitude and practice. Managers may have not spoken openly given that some of the research was conducted in groups and they may have felt loyal to their workplace and colleagues.

Given that data from the focus group discussions and in-depth interviews were transcribed by fieldworkers, the data may also be biased to the interests and perceptions of these staff. This data has also been translated from Bahasa Indonesian into English and in doing so some of the meaning may have been changed slightly.
8. FINDINGS FROM OTHER STUDIES

A number of other countries in the region rely on social health insurance to help fund their AIDS, TB and malaria programs. 31 Thailand and The Philippines rely mainly on insurance for diagnosis and treatment; China and Vietnam rely on a mix of government and insurance funding and Vietnam also has out-of-pocket financing. But in some countries, not all the population are covered, the benefit packages are limited (e.g. no cover for outpatient services), fragmented service delivery system with no coordination, and the amounts paid to providers are less than the cost of providing the services. These can result in delays of early diagnosis and treatment, delays in referring patients, repeated tests, over-prescription of drugs and antibiotics, no motivation to follow DOTS, and high levels of drug resistance cases.

A study carried out by TBCARE II in four countries in 2012 found both benefits and challenges to TB programs resulting from increased TB coverage. 32 Access to TB services increased for registered members in Thailand and Philippines when national insurance was introduced. In India, access improved for some beneficiaries of insurance - members of public sector employee coverage - but not for members of insurance for populations below the poverty line. On the other hand, some characteristics of national health insurance can restrict access to provision of TB services. In Thailand, restrictions on the populations that are covered, location of facilities where services are offered, and increased waiting time may contribute to access barriers (although access and uptake is generally strong). In the Philippines, patients are obliged to seek out accredited sites, which may not be the most convenient, and populations that have not registered for at least three months are denied coverage. In India, insurance programs for the poor only cover hospitalization and not diagnosis and DOTS services.


ANNEXES
Annex 1: Study Design for DKI Jakarta, Aceh and West Java Research

Operational Research

TB Services and Financial Sustainability in Health Insurance Program

Introduction

While at the Beijing Health Systems Research conference in October 2012, the NTP Director learned that many countries are developing strategies to fund the AIDS, TB and malaria (ATM) programs as part of universal health coverage. In many cases this reflects a need to replace shrinking donor funding with domestic resources. Some of these countries are conducting operations research to help design appropriate policies and mechanisms. The NTP Director recognized that Indonesia needs to have its own operations research (OR) program to produce evidence that will be used to guide the MOH and other stakeholders. This proposal for the financial sustainability OR program was developed at the request of the NTP for the NTP, TB CARE I, USAID, GF ATM and other stakeholders.

Background

Great progress has been made in tackling TB over the last few years thanks to the commitment of the Government and financial assistance from donors, including the Global Fund for AIDS, TB and malaria (GFATM) and USAID. There is still, however, a need to continue to expand and improve TB control, for example in the area of MDR-TB detection and treatment.

Significant reductions are expected in GFATM funding from 2015 and the Government of Indonesia is committed to replacing the reductions from domestic sources. Any reductions in funding, especially for detection, diagnosis and treatment, could undo all the good work that has taken place over the years and could reverse the progress towards the elimination of TB. Needless to say, this would translate to increased suffering for patients, their families and society as a whole. A recent study by MSH under TB CARE has estimated, for example, that the economic burden of TB in Indonesia amounts to at least US $2 billion per year.

The two main domestic government funding mechanisms for health services are insurance and government budgets. Out-of-pocket expenses also have a role, for example in funding services from private providers. The government is developing a universal health coverage
scheme to replace the existing government schemes, of which there are several. This is expected to start in 2014 and be fully implemented in 2019. The scheme would be based on packages of services and would ensure that the whole population has coverage.

The policy options for TB are to cover all costs through vertical program mechanisms (government budget allocations at the central, provincial and district levels) or to cover service delivery costs through insurance and the rest from government budget allocations. Both options have support. Some public health managers feel the continuum of care would be better protected if the financing is only from government. There is also concern that including TB, HIV/AIDS and malaria in the benefits package could make the premiums unaffordable. Others who feel that government budgets are too rigid are subject to political influence and that health and Tuberculosis services are not always prioritized, especially at local levels.

Currently there are 3 piloting sites of national health insurance – Aceh, West Java and DKI Jakarta- to prepare the initial implementation of Universal Health Coverage (UHC) in 2014. Conducting operational research in one or more of these sites would provide useful evidence for the design of the full scheme.

**Proposed operations research**

The baseline survey of TB services under the new health insurance scheme is to be used in monitoring and evaluation of a pilot for implementing BPJS in selected health facilities in Aceh, DKI Jakarta and West Java Province.

The policy makers like Ministries of Health and National Tuberculosis Program need to use evidence based of NHI impact on achievement of TB program. It will involve the following:

1. Examine the extent to which TB services have been integrated within NHI schemes.
2. A comparison of the current benefit packages, diagnoses and treatments provided, reimbursement rates and treatment outcomes. Including use of DOTS and an analysis of drugs prescribed by different providers under the different schemes. The analysis will be influential for addressing provider behavior including accreditation. This will include the use of insurance scheme data and the feasibility of collecting such data will have to be checked first.
3. An analysis of care-seeking behavior across the different schemes. Patient access and costs (e.g. co-payments). This will be limited to additional analysis of data from existing and planned studies so no patient interviews are involved.
4. Analysis of the retention, allocation and use of insurance funds received by facilities and districts (related to resource allocation).
5. A desk review of existing research in Indonesia and other countries.
6. Outline gaps and recommendations for improved delivery of TB services within NHI models

Methodology

Study Design

The baseline survey will use a descriptive method and will measure key indicators. Next survey will be conducted after the piloting of BPJS begins at the end of the year 2013.

Places

The study will be done in Aceh, DKI Jakarta and West Java. The three provinces are pilot areas.

Data Collection method (Tools)

We propose to adapt the tool that has been developed with through TB CARE II to get better understanding of TB services within NHI schemes. The study use quantitative (by
questionnaire) and qualitative methods through Focus Group Discussion and In-depth Interviewed. This tool was used in Thailand, Peru, India and Philippines.

The questionnaires were developed to address multiple service delivery levels as follows:

- **Insurance scheme managers**
  - PT. Askes (1 person)
  - PT. Jamsostek (1 person)
  - Jamkesmas (1 person)
  - Jamkesda (1 person)
- **Province health manager (TB Manager)**
- **District health managers (TB Manager)**
- **Facility managers**
  - Private Hospital (1 person)
  - Public Hospital (1 person)
  - Primary Health Care – Private (1 person)
  - Primary Health Care - Public (1 person)
- **Managers of Community-based organization/ NGOs (2 persons)**

It will be adapted to include questions for private providers.

**Data collection procedures**

Close ended questions and focus group discussion will be applied to get the information from respondents.

**Deliverable**

The results of the OR will be written up in technical reports but also as simple policy guidance and advocacy materials, including presentations. The results would be an important contribution to the design of BPJS and the policy-making on the future financing of TB services, and will be communicated through the engagement of USAID via TB CARE I / MSH team members in the task teams and committees who are responsible for setting the policies, including the high-level MOH task team, the case-mix team and the benefits package planning team. The GFATM will be briefed regularly by the MOH.
OR management

The work will be led by David Collins with support from the local MSH Technical Officer, Julie Rostina. The UGM consultant Firdaus Hafidz will assist with the design and management of the OR. Collecting data will be taken by researchers from local universities: Ida Farida, Sri Wahyuni, Raihana Nadra, Dyan Anggraini and Rifka Sibarani.

Schedule for FGD

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 - 09.00</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>09.00 - 09.15</td>
<td>Opening Remarks from the Head of PHO</td>
<td>The Head of PHO DKI Jakarta</td>
</tr>
<tr>
<td>09.15 - 09.30</td>
<td>Opening and brief review of Study objectives</td>
<td>Facilitator</td>
</tr>
<tr>
<td>09.30 - 10.30</td>
<td>Fill in the questionnaire</td>
<td></td>
</tr>
<tr>
<td>10.30 –12.00</td>
<td>Focus Group Discussion</td>
<td>Facilitator</td>
</tr>
<tr>
<td>12.00 - 13.00</td>
<td>Closing and Lunch</td>
<td>Facilitator</td>
</tr>
</tbody>
</table>
Annex 2: Institutions Sampled in DKI Jakarta, Aceh and West Java

1. Aisyiyah, Aceh
2. Province Health Office, Aceh
3. District Health Office, Banda Aceh
4. Meuraxa Hospital, Aceh
5. PT. Askes, Aceh
6. Aceh Health Insurance (JKA)
7. Zainal Abidin Hospital
8. Cempaka Lima Clinic
9. PT. Askes, West Java
10. Aisyiyah, West Java
11. Ibrahim Public Health Centre, West Java
12. Asri Husada Clinic, West Java
13. PT. Jamsostek, West Java
14. Province Health Office, West Java
15. Immanuel Hospital, West Java
16. FHI360, West Java
17. District Health Office, Bandung, West Java
18. KNCV, West Java
19. District Health Office, Central Jakarta
20. Islamic Cempaka Putih Hospital
21. PT. Jamsostek, Jakarta
22. Puskesmas Cempaka Putih, Jakarta
23. Province Health Office, Jakarta
24. PKPU, Jakarta
25. Jakarta Health Insurance (Jamkesda)
26. PT. Askes, Jakarta
27. PPTI Clinic, Jakarta
Annex 3: Preliminary research in 2012

A quick review of TB coverage under public insurance schemes was conducted in several provinces in 2012. With the exception of the West Java these were not provinces that are serving as pilots for the NHIS. The provincial staff interviewed were part of a group that attended a Jamkesda meeting at UGM. For this review we interviewed senior managers and analyzed supporting documents for JAMKESMAS, PT. Askes, JAMSOSTEK and JAMKESDA. Data were collected for districts /municipalities and at 3 provinces for JAMKESDA data.

The sample sites were:

1. Balangan District, Province of South Kalimantan
2. Banjar District, Province of South Kalimantan
3. Hulu Sungai Selatan District, Province of South Kalimantan
4. Tabalong District, Province of South Kalimantan
5. Tapin District, Province of South Kalimantan
6. Balikpapan City, Province of East Kalimantan
7. Kutai Kartanegara City, Province of East Kalimantan
8. Penajam Paser Utara (PPU) District, Province of East Kalimantan
9. Bontang City, Province of East Kalimantan
10. Bangka District, Province of Bangka Belitung
11. Cimahi City, Province of West Java
12. Cirebon City, Province of West Java
13. Magelang District, Province of Central Java
14. Pati District, Province of Central Java
15. Province of South Kalimantan
16. Province of Yogyakarta
17. Province of East Java

In addition, senior health service managers were interviewed, representing 2 Puskesmas in Jogjakarta, 1 Hospital in Jogjakarta and 1 Hospital in Papua).
### Annex 4: Tariffs used by PT. Askes for TB diagnostic tests

<table>
<thead>
<tr>
<th>Type of services</th>
<th>Hospital type A</th>
<th>Hospital type B</th>
<th>Hospital type C</th>
<th>Hospital type D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti TB / IgG TB</td>
<td>187.500</td>
<td>150.000</td>
<td>142.500</td>
<td>120.000</td>
</tr>
<tr>
<td>PCR TB</td>
<td>312.500</td>
<td>250.000</td>
<td>237.500</td>
<td>200.000</td>
</tr>
<tr>
<td>TB culture and resistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Solid Medium. 1st – 2nd line TB drugs)</td>
<td>437.500</td>
<td>350.000</td>
<td>332.500</td>
<td>280.000</td>
</tr>
<tr>
<td>TB culture and resistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Solid Medium. 1st line TB drugs - SIRE)</td>
<td>250.000</td>
<td>200.000</td>
<td>190.000</td>
<td>160.000</td>
</tr>
<tr>
<td>BTA 1 x, liquid medium resistance, culture, 1st line TB drug</td>
<td>437.500</td>
<td>350.000</td>
<td>332.500</td>
<td>280.000</td>
</tr>
<tr>
<td>BTA 1 x, liquid medium resistance, culture, 2nd line TB drug</td>
<td>500.000</td>
<td>400.000</td>
<td>380.000</td>
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<td>BTA 3 x, liquid medium culture</td>
<td>375.000</td>
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<td>BTA 3 x, solid medium culture</td>
<td>187.500</td>
<td>150.000</td>
<td>142.500</td>
<td>120.000</td>
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<tr>
<td>1st line TB drugs resistance</td>
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