

# REPORT

## TECHNICAL CAPACITY MAPPING ON HEALTH TECHNOLOGY ASSESSMENT (HTA) IN INDONESIA

**January 30, 2017**  
**Indonesia**

## **Introduction:**

This report is the outcome of a Technical Capacity Mapping exercise which was conducted by Health Intervention and Technology Assessment program (HITAP) Thailand with the support from International Decision Support Initiative (iDSI). It was performed with an aim to gather information about Health Technology Assessment (HTA) at the organizational level in Indonesia. The report presents the findings from HITAP team who carried out this exercise in April 2016 to map technical capacity in terms of HTA in Indonesia and also to identify potential organizations that provide or deliver HTA or related deliverables. The findings could be valuable to Indonesia health system as well to international development partners, like HITAP and many others to understand the current technical capacity gaps and assist them as needed in terms of supporting consistent use of HTA.

## **Objectives:**

The purpose of this mapping was basically to understand the current HTA practices in Indonesia with the focus on an organizational level and also to explore the area where interventions might be required in the future so as to strengthen the HTA capacity in Indonesia. The objective of this technical capacity mapping exercise were as follows:

- To learn about the centers/institutes that currently conduct HTA studies in Indonesia
- To explore formal HTA and/or EE curriculum (i.e. undergraduate/postgraduate) provided in Indonesia
- To explore relevant training courses on HTA provided for local researchers in Indonesia

## **Methodology:**

The methodology of this technical capacity mapping consisted of reviews of the potential organizations in Indonesia which are related to providing HTA services in someway and also

interviews with the relevant people involved in professional organizations or health institutes/universities were conducted. A questionnaire with 3 basic questions regarding HTA processes/system were distributed amongst the participants. This exercise was intended to gain in-depth and a clear understanding of current HTA research capacity, their progress-so-far, provision of official or unofficial training programs on HTA, to explore the technical capacity requirement and to identify potential external or internal funding/support. The questionnaire sought to answer the following questions:

- Whether or not the informant knew of any centers/institutes currently conducting HTA studies in Indonesia?
- If there a formal HTA and/or EE curriculum (i.e. undergraduate/postgraduate) conducted in Indonesia? If yes, where and by whom?
- If there was a training course on HTA, aimed to build the capacity of the local researchers in Indonesia? If yes, where and by whom?

Following are the main issues of interest:

1. Current HTA research capacity

In the era of evidence-based decision making, HTA helps prioritize the key questions and address gaps. To strengthen the HTA system in any country, it is necessary to see the importance of research capacity of the universities/organizations to conduct researches. In order to explore the HTA research capacity in the current scenario in Indonesia, the availability of HTA research was investigated thoroughly through universities websites, relevant publications on HTA, MOH websites etc. to map the progress Indonesia has made so far in terms of HTA research. The interviewees in this mapping exercise were of various health professions including lecturers, academicians, researchers and technical staffs from universities, MOH, professional organizations and many others. For instance, the

findings were explored via websites of professional organizations such as Indonesia National

Institute of Health Research and Development (NIHRD) under MOH, University of Indonesia, Gadjah Mada University, Center for Health Financing and Health Insurance, Center for health economics and policy studies, Universitas Indonesia and others.

Additionally, this exercise aimed at exploring if there was a specific area of research interest in HTA in Indonesia. Any relevant publications related to HTA research capacity were explored via Google search, institutions websites. Correspondingly, publications on HTA study specifically in Indonesian context were meticulously scrutinized.

It is imperative that the policy makers should know the accuracy of the evidence base, in order to make a well-informed and equitable decision.

## 2. Available official and unofficial training

During the technical capacity mapping process, relevant official or unofficial training programs in Indonesia were explored in order to identify availability and capacity to train and build capacity in HTA. This was primarily done by exploring university websites, pamphlets, flyers and materials as such.

## 3. Technical Capacity and funding support

The technical capacity of the Indonesian institutes/universities to perform or deliver services related to HTA was appraised via surveys, where the respondents answered three questions regarding the current HTA scenario in Indonesia. Similarly, the sources of funding support was explored via publications, websites, and respondents' comments.

## **Results:**

1. Overview of the respondents:

A total of 20 participants responded to the interview questions and following are the names of those participants who responded our survey.

Series	Name
1	Diah Ayu Puspandari
2	Nur Arifah
3	Ully Adhie Mulyani
4	Siti Rizny Fitriana Saldi
5	Levina Chandra
6	Ery Setiawan
7	Ansariadi
8	Ungjun
9	Frans Dany
10	Anggita B.A.
11	Amila Megraini
12	Dwi Endarti
13	Agus Sugiharto
14	Santi Purna Sari
15	Roni Syah Putra
16	Siti Setiati
17	Eka Dian Safitri
18	Yupitri Pitoyo
19	Erna Kristin
20	Septara Putri

Table 1. List of respondents

The participants were all from different backgrounds as can be seen from Figure 1. below

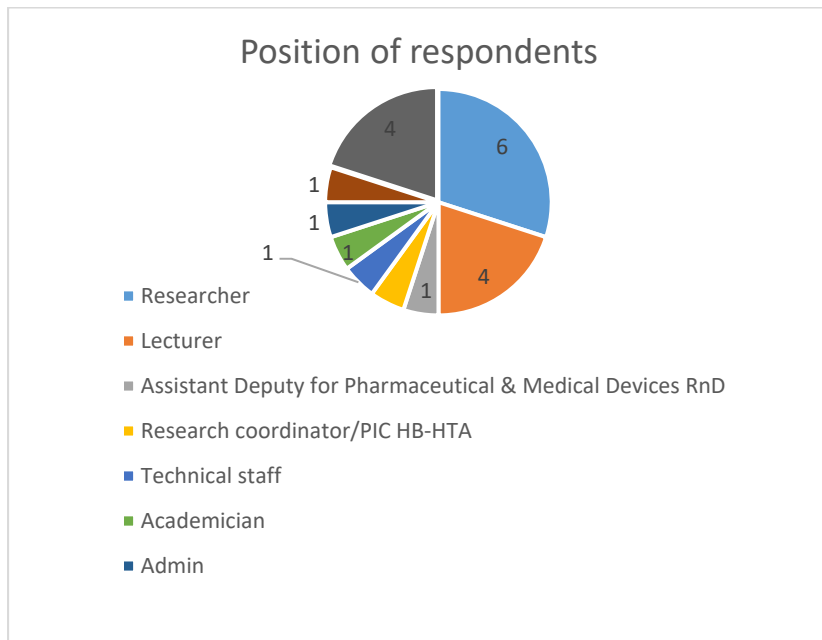


Figure 1. Respondents' position at work

Among 20 respondents, the majority was from University of Indonesia, followed by Clinical Epidemiology and EBM Unit (CEEEM), Cipto Mangunkusumo Hospital/Faculty of Medicine Universitas Indonesia as mentioned in Figure2.

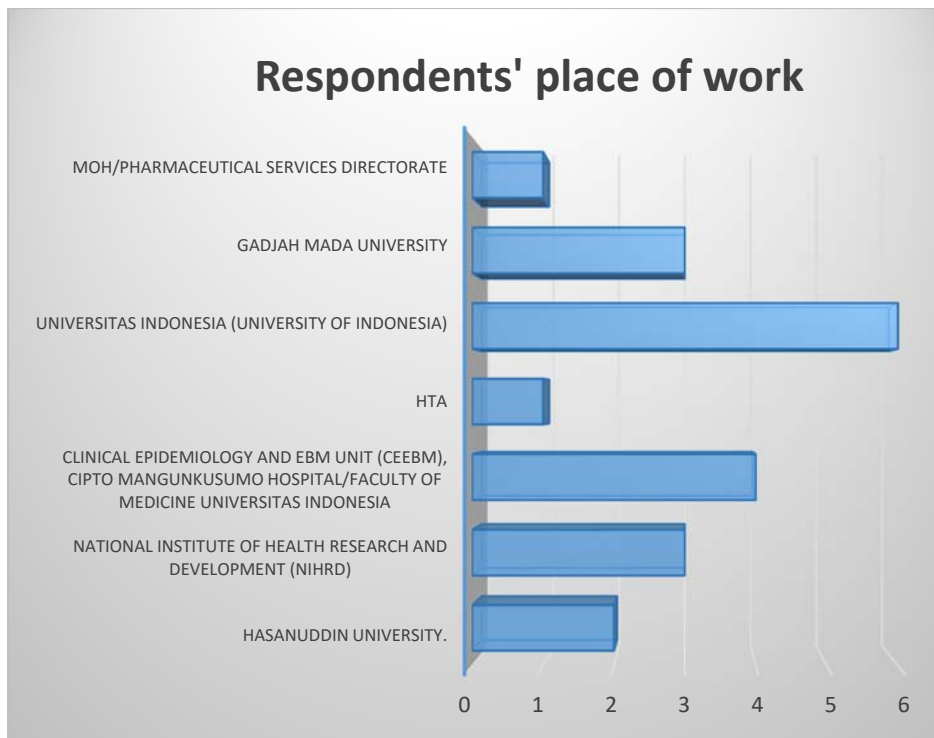


Figure 2. Respondents place of work

## 2. Overview of the survey:

Regarding the first question which probed the presence of centers/institutions that currently conduct HTA studies in Indonesia, the respondents answered with these list of institutes:

- Center for Health Financing and Insurance Management (PUSAT KP-MAK) Faculty of Medicine, at UGM (Gadjah Mada University)
- HTA committee under MOH
- NIHRD
- CEEEM Unit, Cipto Mangkusumo Hospital/Faculty of Medicine Universitas Indonesia
- Faculty of Public Health, and Faculty of Medicine UI

- PPJK (Center for Health Financing and Health Insurance)
- A branch of MoH through the Health Insurance & Financing Center (PPJK) in collaboration with internal parties within MoH and external ones (professional associations, academicians etc.)
- CEEBM Unit, Cipto Mangunkusumo Hospital (Hospital based HTA)
- Center for Health Economic and Policy Studies (CHEPS) UI.

The reviews (via websites, Google etc.) on the current research capacity on HTA in Indonesia shows that there are a few institutes/centers equipped to perform HTA studies. These are as follows:

- NIHRD's central role is to conduct and coordinate health research as well as to create a national research roadmap in areas like vaccines, new drugs, diagnostic kits, model of intervention etc.
- Similarly, Center for health research at the University of Indonesia seems to have an expertise in Health Economics, Policy, and planning analysis, Policy & Health Administration to name a few in terms of HTA research. HTA work in this institute is specifically focused on the health system and policy research.
- Gadjah Mada University has a research specialty on "Financing Policy and Health Insurance Management". This center does its HTA related work through research, consultancy and training and network development at the local, regional and global levels with several stakeholders in government, private, and community levels.
- Center for Health Financing and Health Insurance (PPJK) under MOH is the key partner for Universal health Coverage (UHC) program for UHC capacity building in Indonesia



- Center for Clinical Epidemiology and Evidence-Based Medicine (CEEEM) in collaboration with the University of Indonesia and Cipto Mangunkusumo Hospital, has an expertise in research of health services and also conduct hospital based HTA and education training research in clinical epidemiology and evidence-based medicines.

Regarding the formal HTA or EE curriculum (undergraduate/postgraduate) conducted in Indonesia, the respondents mentioned that there wasn't a formal EE or HTA course. The curriculum in universities or colleges is gradually changing and is now delivering formal HTA courses. Although it has been observed that Faculty of public health and faculty of medicine at the University of Indonesia, CHEPS, undergraduate and postgraduate courses in Gadjah Mada University provide some sort of health policy and management specialization. HTA, though, was limitedly taught. For instance, there is no particular center of HTA in Gadjah Mada University. However, there is a research center and a working group in the faculty of medicine title "Financing Policy and Health Insurance Management" which aims to strengthen the evidence-based health financing policy. Similarly, in Airlangga University, there is no particular center of HTA, but there is a course called "MBA education and health policy" in the faculty of public health. This university aims to equip graduates with expertise in the development of science and technology fields of health policy and management. This program specializes in the research, evaluation and community service in the field of health policy and management. They produce graduates with the skills to continue their education at the doctoral level their fields and to develop the cooperation of the health authorities.

Specific areas of Postgraduate study in management and health policy in Airlangga University includes:

1. Marketing Management and Financial Health (MPKPK).

2. Management Health (MK)

3. Management Hospital (Mars).

4. Management Health Service (MPK)

Regarding the training courses being provided for local researchers in Indonesia about HTA, the response was that the universities had very limited actions on training courses. MOH, CEEBM at UI, CHEPS, few training sessions from the faculty of pharmacy from Gadjah Mada University, faculty of public health at UI are amongst the few institutions which provide training. The Center for Health Financing and Insurance Management (PUSAT KP-MAK) has recently conducted a training course and the next batch will commence early September 2016. A correspondent also pointed out that an E-Learning Based Training platform has been developed, for a wider reach.

According to the reviews from institutes' websites, Google search, following are the examples of courses/institutes which have been conducted in the past to build local capacity:

- Diagnostic research workshop about to be conducted by a unit of CEEBM with training on Appraising diagnostic research, Designing diagnostic research, developing diagnostic research protocols like Research question etc.
- NIHRD has also conducted HTA workshop along with the international symposium (annual event)
- WHO Package of Essential Non-Communicable (PEN) Disease Interventions Economic Evaluation with the support from HITAP and WHO.
- Faculty of Medicine in Gadjah Mada University also offer training courses

- Center for Health Economic and Policy Studies (CHEPS) UI offers many internal capacity building events/training such as training in pharmacoeconomics model for general participants from BPJS, MoH, HTA committee. Have conducted two modeling training in UI and Jakarta.

### 3. Specific areas of research interest:

We reviewed some of the institutes in Indonesia in terms of the areas within HTA which they have explored. For instance for the Gadjah Mada University following are the areas where they are keen to pursue:

- National Health Facility Costing Study
- Essential Health Services Package Costing Modelling
- Equity and Access to Health Care Analysis
- Utilization review and Budget Analysis
- Health Insurance Premium setting
- TB Patient Cost of TB under Health Insurance
- Drug Cost Breast Cancer

In NIHRD, the various centers aim to strengthen health research, legitimize policy and ensure evidence-based health program development. Few of those research areas are:

- Fever study (collaboration with NIH)
- Tuberculosis study
- Disease registry

- Case management research
- Coordinating all clinical research in Indonesia
- Health policy
- Economic analysis of health program
- Reproductive health
- Risk factors of metabolic syndromes and community-based health interventions.
- Health technology and intervention strategies
- Biomolecular Research
- New product research
- New vaccine, drug, and diagnostic kit
- Laboratory-based surveillance
- ILI (Influenza Like Illness) surveillance
- SARI (Severe Acute Respiratory Infection) surveillance

Hospital based HTA: CEEBM unit has been providing hospital-based HTA services in Indonesia.

Some of their current work in HTA includes:

- Hospital-based Health Technology Assessment Projects (HB-HTA)
- Research and Consultation Support System (RCSS)
- Workshop Systematic Review
- Workshop Evidence-Based Practice
- Workshop Biostatistics
- Workshop Medical Writing

A few potential assignments for future engagement for this unit are as follows:

- Hospital-based Health Technology Assessment Projects (HB-HTA)
- Research and Consultation Support System (RCSS)
- Workshop Cochrane Systematic Review
- Walk-in Cochrane Systematic Review
- Workshop Clinical Trials
- Workshop Medical Writing
- Workshop Evidence-Based Practice
- Workshop Health Technology Assessment
- Workshop Evidence-Based Clinical Practice Guidelines

#### 4. Technical capacity and funding support:

The results of the technical capacity mapping survey have shed light on the fact that Indonesian universities/institutions do not have a formal program(s) in HTA and neither do they have any experience. This, however, is gradually picking up as they are planning to conduct training/workshops, introduce formal curriculum in universities or colleges to strengthen the scope of HTA in the future. As far as the funding sources are considered, both the local agencies and external funders play an equal role.

#### **Discussion and Conclusion:**

HITAP helps developing countries such as Indonesia, Vietnam, Bhutan, Myanmar, India etc. to facilitate the process of evidence-based policy making by equipping them with the imperative knowledge of HTA, which is indispensable in resource-limited setting. Since the introduction of Indonesia's National Health Insurance Program (JKN) in January 2014, usage rates of health services have increased markedly outpacing estimates and resources. Indonesia is not yet prepared to move towards a value-based healthcare (VBHC) system. However, it has taken steps towards expanding health technology assessments (HTAs) and evidence-based medicine (EBM)

<sup>1</sup>. Since 2013, HITAP International Unit (HIU) has worked closely with key country partners in Low and Middle Income Countries (LMIC's) for capacity building and HTA institutionalization. HITAP provides technical support to these countries, by sharing the Thai experience in generating and using HTA to make cost effective decisions in healthcare. In collaboration with international partners such as Global Health and Development team in Imperial College, UK, HITAP has been consistently conducting study visits, training, technical workshops, and internship/fellowship programs as a part of a long-term collaboration to provide in these regions. In furtherance of HITAP's unwavering commitment to supporting Indonesia, this technical capacity mapping will prove beneficial by tapping out potential HTA areas for future contribution. It is quite apparent from our survey that even though there are quite a few active HTA agencies in the country, there is a disconnect in translating the evidence from these studies to policy. Building capacity via HTA training courses should be prioritized and formalization of curriculum to help researchers conduct independent studies is much required. However, institutes like NIHRD, PPJK and the University of Indonesia have been actively involved in leading many HTA studies recently that will link into Indonesian national health insurance (JKN) policy. It can be assumed that such economic information is gaining importance in policy decision making <sup>2</sup>. It was found in this survey that universities like Gadjah Mada University, Univeristy of Indonesia, Airlangga University have been working towards conducting economic evaluation researches and also majority of the respondents in this survey were academic researchers which means more academic publications. It points out a good progress and an opportunity for Indonesian policy makers to make best use of evidence informed policy decisions in the country. With the pharmacoeconomic guidelines finalised in 2011 in Indonesia, the next version of guidelines would cover more detailed step by step guidance on conducting pharnacoeconomic analyses for Indonesian policy makers to use the evidences in a credible and systematic way<sup>3</sup> .

## REFERENCES

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