From collaboration to call for action
In the era of Sustainable Development Goals (SDG), universal health coverage (UHC) has become a pressing priority amongst the global community. In response to the global call by the United Nations (UN), Indonesia in early 2014, launched its universal healthcare program, the Jaminan Kesehatan Nasional (JKN).

The JKN program is one of the largest single payer social health insurance (SHI) schemes in the world and is operated by the Badan Penyelenggara Jaminan Sosial (BPJS) Kesehatan. The coverage is planned to expand progressively and the government aspires to achieve universal coverage by 2019; as per the World Bank, by the end of 2016, nearly 172 million individuals or more than 60 per cent of the population were covered.

This scheme features a generous benefits package with minimal user fees or co-payments. The Indonesian population has access to bounteous services even by high-income country standards. These include but are not limited to free dental care, medicine, physiotherapy also a full menu of emergency chronic care including organ transplants. The JKN in contrast to its predecessors endorses egalitarianism, this scheme is more in line with the ‘leave no-one behind’ agenda of the SDGs. Further, in comparison to previous schemes, it has improved purchasing services, a provider contracting system, a national formulary and a provider payment system (capitation and case-based groups-CBGs). Overall, it seems to be an ‘all-inclusive’ proposition to achieve UHC.
CHALLENGES FOR UHC

Current health expenditure in selected South East Asian Countries-2015

Graph 1 Current health expenditure (CHE)-2015
Source: WHO-Global Health Expenditures Database
The geographic, human and economic diversity of the world’s fourth most populous nation poses numerous challenges to the UHC. A noteworthy factor which confines the progress towards UHC in any country is the size of the funding pool that a country is willing to make accessible for the promised healthcare services. Even though investments have tripled since the introduction of the JKN, public health expenditure as a percentage of gross domestic product (GDP) remains low when compared to peer countries. This is evident from Graph I.

Furthermore, the comprehensive benefits package offered as a part of the UHC scheme, reflects a disconnect between the aspirational health plans and accessible financial resource.

**Graph 2** Financial state of JKN (IDR Trillion)

* The projections in the graph are based on the financial year 2014

**Source:** Němec J et al. Financial Sustainability of the National Health Insurance in Indonesia: A First Year Review.
Low investment in health and a lavish UHC scheme has had dire effects on the UHC provider and administrator i.e. the BPJS.

As it stands, the BPJS runs a budget deficit\(^1\) (Graph 2). Based on the estimates and the rise in the cumulative deficit over the years questions the sustainability of UHC, putting the future of JKN in the doldrums. In the given circumstances, the program requires various elemental interventions to make the most out of the finite resource pool.

In 2013, a Presidential Regulation called for the use of health technology assessment (HTA) in deciding the benefits covered by the scheme\(^2\), and the Health Technology Assessment Committee (HTAC) was set up in the Ministry of Health (MoH), Indonesia to serve as the secretariat for HTA activities. Although the agenda for HTA was set in 2013, the discussions and deliberations gained momentum in 2014 and thus the collaboration between the International Decision Support Initiative (iDSI) and HTAC came to be.

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\(^1\) Němec J, Rabovskaja V, Sri Rozanna C, Spatz J. Financial Sustainability of the National Health Insurance in Indonesia: A First Year Review. The authors calculations are based on estimates from the actuarial analysis which was conducted to determine whether JKN's revenues and expenditures are balanced in the coming years. Specifically, the analysis was done to: 1) estimate JKN revenue based on (a) membership numbers and (b) contributions; 2) estimate medical costs via (a) utilisation rates and (b) costs for primary and secondary health care services; 3) estimate medical claim ratio; and 4) Lastly, to forecast JKN's financial state in the future.

Since 2014, the iDSI\(^3\) led by the Health Intervention and Technology Assessment Program (HITAP) has been collaborating with HTAC, Indonesian universities, governmental bodies, and policy-makers to promote HTA institutionalization and HTA capacity development for sustainable UHC in Indonesia. iDSI’s mission to support evidence-informed priority-setting for better health in Indonesia seeks to enhance knowledge transfer and exchange by focusing on five key areas\(^4\), these are:

### KNOWING THE POLICY CONTEXT
Understanding the scenario to gauge what type of policy decisions must be informed by research evidence.

### ENHANCING KNOWLEDGE BROKER
Communicating and advocating the use of research evidence efficiently, identify the existing and potential knowledge brokers working on both evidence supply side and evidence demand side.

### ENHANCING EVIDENCE PRODUCERS’ POLICY RELEVANCE
Engaging with stakeholders and have consultations with the stakeholders around the commencement of the study and a final dissemination event once the studies have finished.

### BETTER COMMUNICATION
Communicating research evidence effectively with all stakeholders, make the information palatable for a generalized audience not only the research community.

### ALIGNING THEORIES OF CHANGE TO SUSTAIN INSTITUTIONAL CAPACITY BUILDING

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\(^3\) iDSI is supported by funding from Bill & Melinda Gates Foundation, the UK Department for International Development, and The Rockefeller Foundation.

\(^4\) Li R. Enhancing knowledge transfer and exchange: Reflections from the Seattle workshop on evidence-informed policymaking. Available from: [www.idsihealth.org](http://www.idsihealth.org)
While there is a complex translation process between “better decisions” and “better health” dependent on many assumptions about local factors and systems (including linkage between decisions and budgets, delivery, implementation, and data accuracy), iDSI also seeks to be explicit about its ambitions, of what it could realistically achieve through helping countries strengthen their institutions for better decision-making.
# HTA in numbers

Over 5 years, this collaboration has significantly contributed to HTA development in Indonesia with the valuable effort of all parties involved:

<table>
<thead>
<tr>
<th>392</th>
<th>man-days that HITAP meet with Indonesian delegates face-to-face</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>visits including HITAP visiting Indonesia and Indonesian delegates visiting Thailand</td>
</tr>
<tr>
<td>10</td>
<td>training workshops conducted</td>
</tr>
<tr>
<td>3</td>
<td>Indonesian delegates took part in internship to gain hands-on experience in HTA at HITAP for at least 2 months</td>
</tr>
<tr>
<td>2</td>
<td>high-level meetings</td>
</tr>
<tr>
<td>8</td>
<td>HTA studies completed under the supervision of HTAC with support from HITAP, out of which 4 studies focused on high-cost technologies.</td>
</tr>
<tr>
<td>2</td>
<td>HTA guidelines (on method and process) produced and endorsed by governmental bodies</td>
</tr>
<tr>
<td>2</td>
<td>international publications made, 1 submitted and 5 in pipeline</td>
</tr>
</tbody>
</table>
iDSI in action

In half-decade, this collaboration between iDSI and HTAC has been immensely fruitful with important lessons learnt for both the parties.

The awareness and acceptability of HTA by the policymakers has certainly grown. In the past, i.e. 2014 to 2016 or Phase 1, HITAP supported completion of three economic evaluations and a qualitative study. These studies were financially supported by external donor agencies. In contrast to Phase 2 the four studies were led by the Indonesian Health Technology Assessment Committee, coordinated by the Center of Health Financing and Security, Ministry of Health, and financially supported by the administrator of the UHC scheme, the BPJS Kesehatan. This is a testimony to the fact that with growing awareness of HTA the policymakers in Indonesia are receptive to the idea of policy recommendations based on sound evidence.

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PROJECT 1</th>
<th>PROJECT 2</th>
<th>PROJECT 3</th>
<th>PROJECT 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERVENTION ASSESSED</td>
<td>Screening and treatment for diabetes and hypertension (PEN program)</td>
<td>Dialysis in end-stage renal disease</td>
<td>Sildenafil for pulmonary arterial hypertension (PAH)</td>
<td>Review of laws, regulations, and uses of off-label drugs in Indonesia</td>
</tr>
<tr>
<td>ASPECT OF ASSESSMENT</td>
<td>Value for money and budget impact</td>
<td>Value for money and budget impact</td>
<td>Value for money and budget impact</td>
<td>Qualitative study, action research approach</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>Economic evaluation of the PEN program already implemented in Indonesia compared to no screening and other screening options. It was found that the current screening program was not cost-effective</td>
<td>Economic evaluation comparing no dialysis and two dialysis policy options that can be reimbursed in Indonesia, i.e. hemodialysis (HD)-first, (conventional approach) and peritoneal dialysis</td>
<td>Economic evaluation comparing sildenafil an off-label gpr PAH and beraprost which is listed in the national drug formulary (FORNAS) was conducted. It was found that sildenafil was cost-effective</td>
<td>This study was conducted to explore the current situation of off-label use of medicines in Indonesia. It describes the advantages and disadvantages in terms of health, economic and ethical impacts and policy recommendations</td>
</tr>
<tr>
<td>IMPACT/RECOMMENDATIONS</td>
<td>Target group of diabetes screening changed from older than 15 years old to older than 40 years old</td>
<td>PD-first policy implemented resulting in potential savings for 1.3 trillion IDR for JKN</td>
<td>Talks about registering Sildenafil for PAH are on-going with high-level policy makers</td>
<td>Recommendations to reimburse the priority off-label medicine with proven clinical benefits under the UHC scheme</td>
</tr>
<tr>
<td>PHASE</td>
<td>PROJECT 1</td>
<td>PROJECT 2</td>
<td>PROJECT 3</td>
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<tr>
<td>INTERVENTION ASSESSED</td>
<td>Nilotinib for chronic myeloid leukemia (CML) treatment</td>
<td>Insulin analogue for type 2 diabetes</td>
<td>Bevacizumab in metastatic colorectal cancer (mCRC)</td>
<td>Cetuximab for mCRC patients with positive KRAS wild-type</td>
</tr>
<tr>
<td>ASPECT OF ASSESSMENT</td>
<td>Irrational drug use and treatment patterns</td>
<td>Clinical effectiveness and safety</td>
<td>Value for money and budget impact</td>
<td>Value for money, budget impact and irrational drug use</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>This study explores the overutilization of nilotinib in CML. Nilotinib should be used only when the patient is resistant to imatinib, but the rate of nilotinib utilization is twice as high.</td>
<td>A systematic review of the use of insulin analogues, which is listed in FORNAS compared to human insulin. It was found that since human insulin was clinically comparable to insulin analogue. The former should be used widely and there is a room for price negotiation.</td>
<td>Bevacizumab is now on the FORNAS for mCRC treatment. This study evaluates the use of bevacizumab in combination with chemotherapy compared to chemotherapy alone. The findings suggest that adding bevacizumab to chemotherapy is not cost-effective.</td>
<td>Cetuximab is now on the FORNAS for mCRC as well as head and neck cancer. However, this study found that using cetuximab in combination with chemotherapy is not cost-effective when compared to chemotherapy alone. Also, cetuximab is also used on indications not listed in FORNAS.</td>
</tr>
<tr>
<td>IMPACT/RECOMMENDATIONS</td>
<td>$0.5 million potential savings if nilotinib is used appropriately</td>
<td>If Indonesia negotiates the price and used the same proportion of human insulin as prevails in Thailand, BPJS could save approximately $9 million annually.</td>
<td>$14 million potential savings if bevacizumab is removed from the benefit package for mCRC treatment</td>
<td>$8.4 million saved if cetuximab is removed from the benefit package</td>
</tr>
</tbody>
</table>
Although, the ground for HTA in Indonesia has been set, it still has a long way to go. Amongst the many factors, which lead to the development of health technology assessment, a conducive factor is effective collaboration\(^5\).

Partnership with iDSI has been an integral part of the development and establishment of HTA in the country, which is evident from the examples mentioned above. For the HTA to flourish in the country, support needs to be demand-driven and policy should be evidence-based. For instance, in this case, the Ministry of Health and the health insurance provider (BPJS) should offer strong support to the HTAC. It is evident from the studies that there is a potential for commendable savings for the BPJS, and if 1% of budget saved from HTA informed policy development is allocated to future HTA activities, the policymakers can ensure that the implementation of UHC is carried out efficiently and with high standards of conduct safeguarding public interests.

In order to ensure the longevity of the UHC initiative, it is essential that the political commitment is complemented by evidence-informed health priority setting. HTA is an important tool to make the UHC policy efficient and legitimate. It is crucial to lay out differences between the idealistic and theoretical set of interventions and optimum and practical set of medical services that should be provided under the UHC. Acknowledging factors such as budget, infrastructure, human resources, geographical barriers and cultural barriers is essential to ensure the sustainability of a health scheme in any setting. Essentially the key is to strike balance between the quantifiable (cost, QALY etc.) and non-quantifiable (preferences, equity) factors or ensuring ‘value for money’. This does not imply reducing costs or cutting budgets but rather about maximizing the health impact of every available rupiah to improve health outcome - putting together an optimal mix of cost-effective interventions. Think beyond the current practice of ‘purchasing’, i.e. the distribution of pooled funds to providers that deliver health care services to the population as per the defined benefit package, to ‘strategic purchasing’, which refers to active, evidence-based engagement in defining the service-mix and volume to maximize societal objectives.

Resources are scarce, and smart decisions about allocation of funds, pricing, promoting equitable access to essential health services, and identifying & reducing policy gaps in current practices are crucial for forging a steady journey for UHC to flourish in Indonesia. Spend smart, achieve more!

ACKNOWLEDGEMENT

This policy brief is a part of the collaboration between the Indonesian Ministry of Health, Health Intervention and Technology Assessment Program (HITAP) through the international Decision Support Initiative (iDSI) funded by the Bill & Melinda Gates Foundation, the Department for International Development, UK, and the Rockefeller Foundation, and PATH under the Access and Delivery Partnership (a project funded by the government of Japan and led by the United Nations Development Programme) and the World Health Organisation Country office. The authors are thankful to the Health Technology Assessment Committee (HTAC), Indonesia, the team from Pusat Pembiayan Dan Jamian Kesehatan (PPJK), the team from University of Indonesia (UI) and the team from University of Gadjah Mada (UGM). Finally, the authors are thankful to Dr Ryan Li for his inputs.

AUTHORS

Manushi Sharma\(^1\)
Dr. Yot Teerawattananon\(^1\)

CONTACT PERSON

Manushi Sharma: manushi.s@hitap.net

\(^1\) Health Intervention Technology Assessment Program (HITAP)

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