

The Philippine Health Technology Assessment program: Insights from the outcome evaluation

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Introduction

In policymaking, health technology assessment (HTA) plays an important role, enabling a comprehensive evaluation of health technologies in terms of their coverage, applicability, and effectiveness across various contexts and environments (Velasco Garrido 2008). The World Health Organization defines HTA as “the systematic evaluation of properties, effects, and/or impacts of health technologies and interventions” (Bertram et al. 2021, p.4). Through this systematic approach, a formal priority-setting process can be achieved to ensure that reimbursement decisions are uniform, follow a set guideline, involve all relevant stakeholders, and are not influenced by external forces. This *Policy Note* evaluates the effectiveness of HTA implementation in the Philippines and provides recommendations to enhance the program moving forward.

How has HTA been practiced in the Philippines?

HTA has been practiced in the Philippines since 1999, with the passage of two significant laws that solidified its establishment. The National Health Insurance Act of 2013 mandated using HTA in evaluating interventions covered by the Philippine Health Insurance Corporation (PhilHealth). Additionally, the Universal Health Care (UHC) Act of 2019 included provisions for the formation of an HTA program under the Department of Health (DOH), which would later transition to the Department of Science and Technology (DOST) (Gad et al. 2018).

Salient Points:

- *End users of the Health Technology Assessment (HTA) program are generally satisfied with its value in agenda setting, policy formulation, and institutional fit with the healthcare system.*
- *However, they are dissatisfied with the HTA team’s performance in stakeholder engagement, external communication, increasing the capacity of the HTA, and incorporating diverse perspectives into its recommendations.*
- *The implementation of the HTA program faced challenges, including a lack of evidence for appraisals, the urgency to release recommendations, external pressure, a misunderstanding of its role, and insufficient stakeholder consultations.*

What is being done now?

Since the formal establishment of the HTA program in 2019 through the UHC Act, the program has faced significant challenges, particularly due to the COVID-19 pandemic. However, the role of the HTA program has been crucial during this health crisis, as evidence-based

health policy decisions are urgently needed within a shortened timeline. Despite the urgency, the HTA program ensures evidence appraisal and stakeholder inputs in creating recommendations communicated to the public (Ananthakrishnan et al. 2022).

Why is it crucial to evaluate HTA performance?

The impact of HTA in policymaking is strengthened when key stakeholders like the implementers and end users are involved through collaboration and transparency in the processes (Velasco Garrido 2008). Since the HTA program is transitioning to the DOST, and with the shift of focus from COVID-19-related assessments toward other health technologies, this assessment would help illustrate the current performance and provide recommendations for the Philippine HTA program. In this study, the Philippine HTA program's effectiveness since its establishment is assessed using the value tree impact mapping framework by Millar et al. (2021). Through this evaluation framework, the mechanisms of impact of the Philippine HTA program can be summarized using the data from the key informant interviews (KIIs) and focus group discussions with the end users and program implementers. The different perspectives from these two groups are outlined, showing their take on "how recommendations are effectively translated into policy decisions, how it is progressing toward the fulfillment of the UHC Act mandates, and whether investments to the infrastructure are justified or not" (Wong et al. 2022, pp.1–2).

Research design

Study design

The impact of HTA agencies in different countries has been well-evaluated. Gerhadus et al. (2008), cited in Millar et al. (2021), illustrated a six-stage impact model highlighting the awareness, acceptance, policy process, policy decision, practice, and outcome of generated HTA reports. These are important elements in evaluating the HTA program and its overall objectives.

This study utilized the Donabedian model¹ of healthcare quality and adapted it to the HTA program, specifically focusing on evaluation outcomes. The information from this study was gathered from an extensive review of all HTA policies and reports and KIIs with multisectoral groups of HTA end users and members of the HTA Council (HTAC) and HTA Division (HTAD). Following the framework proposed in this study, questions asked during the interview were based on literature (Liu et al. 2018; Millar et al. 2021) and focused on assessing stakeholder perceptions and observations on the acceptance and outcomes of HTA recommendations. Results were analyzed using an outcome assessment, adapting the value tree impact mapping by Millar et al. (2021). Lastly, additional recommendations based on satisfaction responses were generated using deductive content analysis. The information obtained was triangulated with existing literature to ensure the soundness of the recommendations.

Results

End users' perspective of the HTA processes

- ***HTA's high impact on the health system's policymaking and in providing patient services.*** HTA recommendations are critical not only in the decisionmaking process on health investments of all units but also in the provision of patient services. These recommendations can potentially influence the inclusion or noninclusion of medicine in the Philippine National Formulary and other health technologies. Thus, they have a direct impact on priorities and the range of health services available to patients. Without HTA backup, innovative medications remain inaccessible to patients in government facilities, resulting in out-of-pocket expenses if they choose to avail themselves of these treatments. For instance, the HTA has been

¹ The full report (Millar et al. 2021) provides a visualization of the Donabedian model's application to HTA program.

instrumental in providing patient services during COVID-19, as assessments of COVID-19 technologies initiated the deployment and procurement of COVID-19 technologies.

Relevant government agencies highly regard the HTA recommendations for their rigor and multidisciplinary nature. The scientific rigor of HTA assessments makes them invaluable in decisionmaking, policy drafting, and agenda setting, particularly in decisions on cost-effectiveness and innovativeness of technology and medications.

As mandated by the UHC Act, HTA recommendation is required before deploying health technology and benefits packages. However, this requirement can potentially cause delays in the agenda-setting and formulation process. The meticulous HTA process, although important, may result in recommendations not being delivered promptly. This delay can pose challenges, especially when immediate approval of medicines is required for vulnerable end users, such as cancer patients.

As the COVID-19 pandemic becomes less severe, end users have suggested that HTA should transition and prioritize treatment medicines for vulnerable populations (e.g., cancer patients) and other health technologies. Moreover, the delays experienced during this transition can be attributed to the limited capacity of the HTA. Despite the requests from the Department of Budget and Management for plantilla positions to complement the program's needs, the granted number of posts fell short of expectations. Hence, staff members have been overworked, resulting in a high turnover rate, especially during the early months of the COVID-19 pandemic. Another challenge is the lack of training opportunities and formal instruction specific to HTA in the country.

- ***HTA's effective engagement and external communication strategy.*** HTA and its end users have established communication and working relationships through consistent collaboration and priority alignment. However, end users have raised the importance of improving the communication of the HTA results to relevant stakeholders and the public, as well as conducting genuine consultations with stakeholders, especially patient groups and representatives. A proposed solution is to translate recommendations into layman's language to bridge the gaps in understanding HTA's role within the health system. This approach can also help mitigate external pressures and conflicts of interest that may lead to the premature release of urgent recommendations without sufficient evidence. It is also acknowledged that the COVID-19 assessment process lacked consultation with stakeholders, especially patient groups. Therefore, other stakeholders, such as private payers and patients, must be consulted, and additional perspectives (e.g., health systems, societal) must be considered to make its recommendations more responsive to the realities of the Philippine healthcare system.
- ***HTA as a tool for negotiating health technology prices.*** HTA is not utilized to negotiate technology prices, as it is not included in the mandates of the end users. Although the study respondents did not find it useful, they believed HTA was relevant for price negotiations, which are handled by a separate board within the DOH.
- ***HTA's impact on policy change.*** Assessing the direct impact of HTA recommendations on policy changes was difficult because it was still in its early implementation stages at the time of data collection. While these recommendations have been valuable to government agencies and policymakers, clinical experts expressed the need for more context-specific recommendations. Respondents also identified monitoring as a point for improvement, but HTAC claimed this was beyond their scope.

HTA program implementers' perspectives of the HTA processes

The concept of the HTA in the Philippines is not new, as there had been an HTA unit under PhilHealth. This made it easier for advocates of the UHC Act to champion the reestablishment and institutionalization of the HTA. Following the passage of the UHC Act, HTA program implementers focused on initial tasks and operationalizing HTA, including establishing its structure and governance and developing Methods and Process Guides. However, the process was disrupted

by the outbreak of the COVID-19 pandemic, which coincided with the finalization of the Methods and Process Guides for HTA. Because of the urgency for COVID-19 assessments, the HTA program shifted its focus toward addressing the pandemic, postponing its original plans, such as designing the PhilHealth Primary Benefit packages (and other UHC Act provisions).

Table 1 shows a summary of the challenges in the HTA process encountered by program implementers, along with proposed action plans to address these challenges.

Table 1. HTA program implementation challenges and action points

Challenges	Possible Action Points
<p>Refocus on COVID-19 assessments. COVID-19 assessments have been referred to as a “baptism of fire” for the HTA program. Few technologies were assessed in between COVID-19 urgent assessments and rapid review, including the priorities of DOH, PhilHealth, and hospitals.</p>	<p>The lessons learned and best practices from the HTA process during the COVID-19 assessments will be invaluable as the program transitions to assessing other health technologies and continuously refining the HTA Methods and Process Guides.</p>
<p>Lack of evidence during the appraisal. According to HTA program implementers, a major problem during the appraisal is the scarcity of evidence, especially since the COVID-19 pandemic is a health emergency and related technologies are new and still need to be tested.</p>	<p>More research collaborations with academic institutions must be advocated to generate local evidence. Besides the WHO as a reference and leading governance, HTA must also benchmark with evidence from HTA units of other countries.</p>
<p>Limited capacity of HTA. HTA program implementers acknowledged some capacity limitations in the HTA department, which affect or compromise the HTA process, timeline, and priorities. To address these challenges, implementers have requested the DBM for plantilla positions to complement the needs of the HTA. However, the number of positions granted fell short of the expected amount. Hence, the staff’s workload has been substantial, leading to a high number of resignations or staff leaving to pursue other career paths.</p>	<p>There is a need to increase the plantilla positions within the HTA to expand its role and capacity. HTA must continue to lobby for additional plantilla positions while actively collaborating with other countries’ HTA units. These collaborations should focus on staff capacity building to advance their skills in the HTA methodologies and support their professional development.</p>
<p>Communication and engagement with HTA end users or other stakeholders. To ensure a more consultative HTA process, program implementers envision having stronger stakeholder and patient group representation. However, due to the urgency of the COVID-19 assessments, one significant HTA process, namely, consulting end users and other stakeholders, was not conducted.</p>	<p>HTA program implementers must prioritize increasing public dialogues and improving the communication of HTA recommendations. The intent should be to translate the scientific language of HTA recommendations into easily understandable terms, mitigating misinterpretation, especially among policymakers. To this end, HTA has started forming a communication team focusing on this aspect.</p>

COVID-19 = coronavirus disease 2019; HTA = Health Technology Assessment; PhilHealth = Philippine Health Insurance Corporation; DOH = Department of Health; WHO = World Health Organization; DBM = Department of Budget and Management
 Source: Authors’ compilation based on key informant interviews

Conclusions and recommendations

HTA moving forward

This study uncovered mainly positive experiences among end users regarding the HTA program in the country. However, it also highlighted the need for enhanced collaboration among relevant stakeholders and implementing efficient data systems to further strengthen the program's assessment capabilities. As discussed in the findings, end users recognized the value of HTA in agenda setting, policy formulation, and its institutional fit with the healthcare system. Nonetheless, there is still room for improvement in terms of stakeholder engagement, external communication, enhancing the HTA's capacity, and incorporating diverse perspectives into its recommendations.

Thus, based on the assessment findings, the following are recommended.

Action

- To address the lack of local data, it would be best for the HTA unit to perform an inventory of existing data systems in public and private hospitals, medical societies, academe, medicine, and device manufacturers.
- To enhance external communication with its end users, the HTA Technical Secretariat should create a strategic communication plan that identifies key audiences, core messages on the HTA processes, and appraised technologies (whether approved or not). It should also establish communication platforms for effective dissemination.

Policy

- To expedite the process, HTAC should review existing policies and create new ones. This includes revisiting the requirements for

phase 4 clinical trials and considering positive recommendations from the WHO, increasing the HTA capacity, and prioritizing the assessment of non-COVID technologies.

- To improve HTA capacity, the HTAD should also perform a landscape analysis of priority diseases (e.g., the 48 diseases contributing to 80 percent of the disability-adjusted life years), identify potential innovative technologies that are not yet available in the country, and prioritize them for assessment. Additionally, the HTAC should seek increased funding to expand the capacity of its assessment teams. This will lead to a faster approval process, thereby increasing the number and range of technologies that can be reviewed and approved annually.
- To expand the breadth of its assessments and appraisals, the HTA should consider implementation arrangements, health system capacity, and ethical, social, and legal aspects of the target technologies.
- To address the financing of technologies for special populations, the DOH should explore alternative policy options, as HTA's utilitarian approach may not prioritize technologies for persons with disabilities, persons with rare diseases, and similar populations.

Research

- To improve the monitoring of its recommendations, the HTA Technical Secretariat should undertake annual performance reviews of the program, create a monitoring and evaluation framework, and design a long-term impact evaluation study (to be conducted at least 10 years from HTA inception). Moreover, it should initiate the immediate creation of an information system to measure impact.

References

- Ananthakrishnan, A., A.C.G. Luz, S. Kc, L. Ong, C. Oh, W. Isaranuwatjai, S.V. Dabak, Y. Teerawattananon, and H.C. Turner. 2022. How can health technology assessment support our response to public health emergencies? *Health Research Policy and Systems* 20(1):124.
- Bertram, M., G. Dhaene, and T. Tan-Torres Edejer, Editors. 2021. *Institutionalizing health technology assessment mechanisms: How to guide*. Geneva, Switzerland: World Health Organization.
- Gad M., A. Winch, and F. Ruiz. 2018. Technical assistance for health technology assessment: Capacity building in the Philippines. Inception report (Task 1) v2.0. London, UK: Imperial College Consultants.
- Liu, W., L. Shi, R.W. Pong, H. Dong, Y. Mao, M. Tang, and Y. Chen. 2018. Determinants of knowledge translation from health technology assessment to policymaking in China: From the perspective of researchers. *PLoS One* 13(1):e0190732.
- Millar, R., A. Morton, M.V. Bufali, S. Engels, S.V. Dabak, W. Isaranuwatjai, K. Chalkidou, and Y. Teerawattananon. 2021. Assessing the performance of health technology assessment (HTA) agencies: Developing a multi-country, multi-stakeholder, and multi-dimensional framework to explore mechanisms of impact. *Cost Effectiveness and Resource Allocation* 19(37):1–14.
- Republic Act 10606. 2013. An act amending Republic Act No. 7875, otherwise known as the “National Health Insurance Act of 1995”, as amended, and for other purposes. Manila, Philippines: Congress of the Philippines.
- Republic Act 11223. 2019. Universal Health Care Act. Manila, Philippines: Congress of the Philippines.
- Velasco Garrido, M. 2008. *Health technology assessment and health policymaking in Europe: Current status, challenges and potential*. Geneva, Switzerland: World Health Organization.
- Wong, J.Q., S.A.L. Co, C.A.E. Modina, K.C. Fowler, M.G. Tarroc, E.U. Mallari, A.L. Tan, and C. Yao. 2022. An outcome evaluation of the Philippine Health Technology Assessment program. PIDS Discussion Paper Series 2022-59. Quezon City, Philippines: Philippine Institute for Development Studies. <https://www.pids.gov.ph/publication/discussion-papers/an-outcome-evaluation-of-the-philippine-health-technology-assessment-program> (accessed on 15 November 2022).

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