USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTaPS) PROGRAM

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Asia HTA hub assessment report

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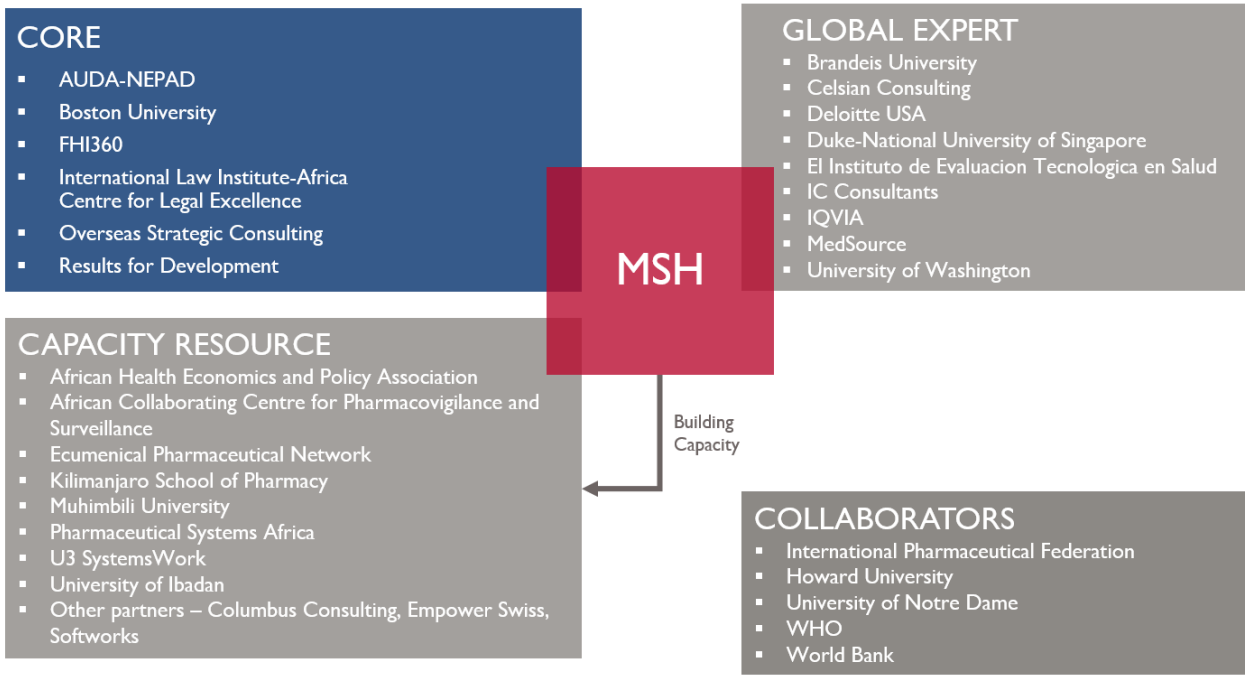
About the USAID MTaPS Program

The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to higher-performing health systems. MTaPS focuses on improving access to essential medical products and related services and on the appropriate use of medicines to ensure better health outcomes for all populations. The program brings expertise honed over decades of seminal pharmaceutical systems experience across more than 40 countries. The MTaPS approach builds sustainable gains in countries by including all actors in health care—government, civil society, the private sector, and academia. The program is implemented by a consortium of global and local partners and led by Management Sciences for Health (MSH), a global health nonprofit.

The MTaPS Consortium



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ACRONYMS AND ABBREVIATIONS

ACE	Agency for Care Effectiveness (Singapore)
ADB	Asian Development Bank
APF	Asia Policy Forum
ASEAN	Association of Southeast Asian Nations
BMGF	Bill & Melinda Gates Foundation
BRISA	La Base Regional de Informes de Evaluación de Tecnologías en Salud de las Américas
CDE	Center for Drug Evaluation (Taiwan)
CGD	Center for Global Development
CHEPS	Center for Health Economics and Policy Studies (Indonesia)
CSR	corporate social responsibility
DOH	Department of Health
EUnetHTA	European Network for Health Technology Assessment
FCDO	Foreign, Commonwealth & Development Office
GEAR	Guide to Economic Analysis and Research Online Resource
HITAP	Health Intervention and Technology Assessment Program (Thailand)
HSPI	Health Strategy and Policy Institute
HTA	health technology assessment
HTAC	Health Technology Assessment Council (Philippines)
HTAi	Health Technology Assessment International
iDSI	International Decision Support Initiative
INAHTA	International Network of Agencies for Health Technology Assessment
InaHTAC	Indonesian Health Technology Assessment Committee
ISPOR	Professional Society for Health Economics and Outcomes Research
JKN	Jaminan Kesehatan Nasional (National Health Insurance)

KII	key informant interview
LMIC	low- and middle-income country
MaHTAS	Malaysian Health Technology Assessment Section
MOH	Ministry of Health
MTaPS	Medicines, Technologies, and Pharmaceutical Services Program (USAID)
N/SHI	national/social health insurance
NECA	National Evidence-based Healthcare Collaborating Agency (South Korea)
NUS	National University of Singapore
NZAP	New Zealand Aid Programme
PAHO	Pan American Health Organization
PhilHealth	Philippine Health Insurance Corporation
RedETSA	Health Technology Assessment Network of the Americas
SEARO	South-East Asia Regional Office (of the World Health Organization)
UHC	universal health coverage
USAID	US Agency for International Development
WHO	World Health Organization
WPRO	Western Pacific Regional Office (of the World Health Organization)

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PROJECT SUMMARY

Program Name:		USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program
Activity Start Date And End Date:		September 20, 2018–September 19, 2023
Name of Prime Implementing Partner:		Management Sciences for Health
Contract Number:		7200AA18C00074
MTaPS Partners	**Core Partners**	Boston University, FHI 360, Overseas Strategic Consulting, Results for Development, International Law Institute-Africa Centre for Legal Excellence, NEPAD
	Global Expert Partners	Brandeis University, Deloitte USA, Duke-National University of Singapore, El Instituto de Evaluacion Technologica en Salud, IC Consultants, Imperial Health Sciences, MedSource, QuintilesIMS, University of Washington
	Capacity Resource Partners	African Health Economics and Policy Association, Ecumenical Pharmaceutical Network, U3 SystemsWork, University of Ibadan, University of Ghana's World Health Organizations (WHO) Pharmacovigilance Collaborating Center, Kilimanjaro School of Pharmacy, Muhimbili University, Pharmaceutical Systems Africa
	Collaborators	International Pharmaceutical Federation, Howard University, University of Notre Dame, WHO, World Bank

EXECUTIVE SUMMARY

Assessment purpose. Countries in the Asia region have advanced considerably in adopting health technology assessment (HTA) to support decision-making; however, HTA practice varies, both technically and organizationally, as does the pace of progress. Three tiers of HTA systems exist in Asia—countries with strong HTA capacity and systems, growing HTA capacity and systems, and newly emerging HTA capacity and systems. USAID commissioned the Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program, led by Management Sciences for Health, to assess demand for HTA capacity building and systems development in the region and to recommend priorities and mechanisms for supporting that demand.

Assessment approach. The assessment had three stages: (1) review of 78 documents that shed light on the Asia HTA landscape and maturity of country systems; challenges, needs, and demands for HTA capacity building and systems development; and financing options for an HTA hub; (2) self-administered electronic survey of 25 HTA stakeholders; and (3) in-depth interviews with 28 Asian and global voices that enriched knowledge about the demand and HTA development support mechanisms.

Findings. Demand for HTA in Asia has increased, and intraregional support for HTA strengthening and development is strong. Demand parameters span the full range of HTA systems, including technical "doing" and "using" components of the HTA process and institutionalizing and managing HTA systems. Although the HTAsiaLink–Secretariat nexus is widely considered to be the de facto HTA hub in Asia, there is perceived unmet need for more formalized and integrated program support. Key informants' priorities for hub support were 1) creating and implementing an integrated, region-wide human resource capacity development plan that covers the full functional range of an HTA system; 2) supporting countries to strengthen the political economy environment for HTA systems development; 3) providing HTA support to promote universal health coverage (UHC) and national/social health insurance (N/SHI) country agendas; and 4) promoting regional and within-country alignment across the HTA value chain, connecting HTA technical experts, policymakers, regulators, and health practitioners.

Key informants also recommended that the hub produce and strengthen certain HTA "public goods" products, including Guide to Economic Analysis and Research Online Resource (GEAR), Health Intervention and Technology Assessment Program's (HITAP) database of regional HTA results, and reference case guides. Two models can be considered for a more formal and integrated program approach for Asia, that of Health Technology Assessment Network of the Americas (RedETSA)–Pan American Health Organization (PAHO) and European Network for Health Technology Assessment (EUnetHTA). Financing a more formal hub organization and an expanded program is likely to be a challenge, though a broad range of funding options exist and should be explored.

Recommendations for USAID. (1) Support the HTAsiaLink–HITAP arrangement, which would be a faster, more successful pathway to ramp up its level and breadth of regional support; (2) support HTAsiaLink–HITAP to produce a region-wide HTA human resources capacity development strategic plan; engage National University of Singapore's (NUS) School of Public Health to play an integral role in that process; (3) support efforts to connect policy and political leaders with HTA stakeholders to improve the political and policy environment for HTA; (4) support establishment of a working group to consider the hub's vision and purpose; (5) support strengthening GEAR and expanding the region's growing library of reference case guides; and (6) support HTAsiaLink–HITAP in considering funding sources and mechanisms and producing a resource mobilization plan.

BACKGROUND AND INTRODUCTION

EVOLUTION AND STATE OF HTA IN ASIA

Countries in the Asia[1] region have made considerable progress toward achieving UHC, including adopting HTA to support evidence-informed decision-making. Forward momentum is imperative as all countries face challenges from a rapidly evolving medical technology landscape, transformations in medical products brought about by the fourth industrial revolution, and increasingly expanding medical product sourcing options, to name a few.

HTA practice varies within the region, both technically and organizationally. As HTA covers a broad range of products and interventions, some HTA organizations have advanced further in certain areas. Variance in HTA institutions and practices also depends on the mandate given by their country government. Some of the countries included in this assessment have broad policy guidance on the HTA process and have started applying HTA to benefits coverage and reimbursement decisions (Kumar 2022). However, the pace of progress varies across the region, and three tiers of HTA maturity have emerged. The first tier includes mostly high-income countries, including Japan, Singapore, South Korea, and Taiwan. Upper middle-income Malaysia and Thailand also have relatively mature HTA systems. The second tier includes countries clearly committed to institutionalizing HTA and its use, including Bhutan, Brunei, China, India, Indonesia, Pakistan, Philippines, and Vietnam. The countries in the final tier, where HTA development is at an earlier stage, are Bangladesh, Cambodia, Lao PDR, Myanmar, Nepal, and Sri Lanka. Because they are more advanced, agencies, such as HITAP from Thailand and the National Evidence-based Healthcare Collaborating Agency (NECA) from South Korea, have provided technical assistance and support to regional HTA development, the latter by way of having served at the HTAsiaLink Secretariat until early 2022.

USAID MTAPS SUPPORT FOR HTA IN ASIA

The US Agency for International Development (USAID) supports evolution to UHC and self-reliance in low- and middle-income countries (LMICs). Focusing on HTA, USAID has commissioned the MTaPS Program, led by Management Sciences for Health, to work on several activities. In 2020, MTaPS conducted a systematic review (Suharlim 2022) and developed *A Roadmap for Systematic Priority Setting and Health Technology Assessment (HTA): A Practical Guide for Policy Action in Low- and Middle-Income Countries* (Castro 2020), also referred to as the HTA roadmap, to guide HTA institutionalization. MTaPS has also conducted various research to further understand the status, drivers, and challenges for HTA, specifically in the Asia region (Kumar 2022).

[1] Asia is a large and diverse region. It includes countries in Southeast Asia, East Asia and the Pacific, South Asia, and Central Asia. This report does not attempt to define the sub-regions and countries that an HTA hub serving Asia might include. That task is best left to stakeholders. However, as will be described later in this report, there was general agreement among key informants interviewed that Southeast and South Asia are most relevant to the current context of an Asia HTA hub coverage range. Central Asia and Pacific Island countries, we were informed, tend to seek and obtain support from different sources. Several East Asian countries have long engaged with Southeast Asian countries to support HTA ecosystem development and are included here in the context of an Asia HTA hub.

In program year 4, MTaPS is working closely with USAID's Asia Bureau to build countries' pharmaceutical systems by strengthening their ability to institutionalize transparent and evidence-based decision-making, building their capacity to use robust information to define and cost pharmaceutical coverage, and strengthening medicine regulatory capacity and pharmaceutical sector governance in the region. To support this goal, MTaPS aims to increase countries' capacities to conduct and use HTA. One of MTaPS' year 4 activities is to explore the demand, feasibility, and sustainability of an HTA hub in the region.

RATIONALE FOR THE ASSESSMENT

Regional HTA hubs, such as RedETSA and EUnetHTA, have supported HTA development and advancement by regional collaboration and capacity building. In Asia, HTAsiaLink and HITAP implement hub-like activities. Because HITAP is now serving as HTAsiaLink's secretariat, there are opportunities to build on this nexus to further evolve HTA practice and use in Asia to increase the:

- Volume of HTA work
- Quality of HTA outputs
- Use of HTA in decision-making
- Impact of HTA on the health sector and health

This assessment was conducted to identify parameters of demand for HTA support and development in the region, examine how an HTA hub can meet that demand, and identify structures and institutions that can provide support.

ASSESSMENT APPROACH

This assessment was completed in three stages.

Stage 1: Literature review: Using a multipronged approach, reference material was identified to shed light on the following topics:

- The HTA landscape in Asia and the maturity of country systems and organizations
- Challenges and needs for HTA capacity building and systems development
- Demand for supporting HTA capacity building and institutional development within and among countries in the region
- Financing to support capacity building and HTA systems development

The inquiry focused on HTA in South and Southeast Asia.[2] Sources included:

- MTaPS staff engaged in HTA work
- Online web searches of HTA as a key word in combination with other key words including Asia, individual Asian country names, names of organizations of interest and topics relevant to HTA (such

[2] Central Asia is generally not integrated into regional HTA dialogue and processes with the rest of Asia. In-depth interviews revealed that Central Asian countries tend to engage European mutual support networks. MTaPS did not seek information on Western Pacific nations for a similar reason; they tend not to integrate with networks in Southeast Asia. Rather, they seek support from New Zealand and Australia.

as capacity building, capacity development, institutionalization, institutional development); search terms for organizations, including the Center for Drug Evaluation (CDE), Center for Global Development (CGD), EUnetHTA, HITAP, Health Strategy and Policy Institute (HSPI), Health Technology Assessment International (HTAi), HTAsiaLink, International Decision Support Initiative (iDSI), International Network of Agencies for Health Technology Assessment (INAHTA), Indonesian Health Technology Assessment Committee (InaHTAC), Professional Society for Health Economics and Outcomes Research (ISPOR), NECA, PAHO, PhilHealth, RedETSA, South-East Asia Regional Office (SEARO), and WHO

- Bibliographies and reference lists of documents identified

Content and content gaps ascertained from stage 1 were used to create a survey instrument (stage 2) and guides for in-depth interviews (stage 3).

Stage 2: e-Survey of HTA stakeholders in Asia: Learning from the stage 1 literature review, MTaPS created a 5-section (box 1), 24-item survey instrument targeting HTA practitioners in Asia, including HTA technical experts, HTA agency administrators, policymakers, health care providers, and advocates (annex A has a copy of the survey instrument). MTaPS sent a link to the instrument by email to 125 HTA practitioners in Asia identified during stage 1 for online self-administration. Recipients were asked to complete the survey within 10 days. Responses were tracked using a SurveyMonkey feature, and non-respondents were reminded of the response deadline two days prior to the deadline. The deadline was then extended by three days to encourage additional responses.

Box 1. e-Survey sections

1. Respondent information
2. General perceived organizational need for an HTA hub
3. Perceived country need for an HTA hub
4. Demand for specific hub output
5. Thoughts on home base for a regional hub

Stage 3: In-depth interviews with Asian and global HTA experts: eSurvey results were used to refine in-depth interview guidelines (annex B). MTaPS invited 50 global and regional HTA experts to participate in a 45- to 60-minute discussion to provide a more in-depth understanding of the demand for HTA support and development in Asia and organizational preferences for hub support. A total of 21 interviews were conducted with 27 key informants (annex C has a list of organizational affiliations of key informants that were interviewed.) Types of key informants targeted were:

- HTA practitioners in Asia: HTA "doers" and "users," representing government HTA agencies, HTA focal organizations, academic institutions, members of the HTAsiaLink Board of Directors, and technical assistance entities
- Donor and global philanthropic foundation: Representatives from the World Bank, Asian Development Bank (ADB), PAHO, SEARO, and Bill & Melinda Gates Foundation (BMGF)
- Global HTA support organizations and regional HTA hub organizations: Representatives from EUnetHTA, INAHTA, CGD and its iDSI, and HTA International (HTAi)

FINDINGS FROM THE LITERATURE REVIEW

Table 1 summarizes the reference material reviewed during this assessment, listed by their primary focus topics[3] (annex D contains the full list of references identified and reviewed).

Table 1. Summary of references reviewed during assessment stage 1*

	Types and number of references			
Reference topic	**Peer-reviewed articles**	**Slide decks**	**Organization reports**	**Government documents**
Country HTA landscape	17	3	10	3
Organizational description or history	4	1	6	0
Regional landscape	3	1	1	0
Global HTA support	2	0	0	0
HTA challenges and needs	12	0	1	0
HTA system development and capacity building	5	1	0	0
Technical topic	9	0	3	0
Total reference documents reviewed	52	6	21	3

* A total of 78 documents were identified; 4 were included in more than 1 category, bringing the table total to 82.

The reference material mobilized during stage 1 mostly described organizations or countries, HTA and its system elements, or general (not country-specific) needs for HTA maturity development.

HTA ORGANIZATIONAL LANDSCAPE IN ASIA

The literature provided a good understanding of the institutional landscape in Asia (table 2). It was less useful for understanding specifics about the purposes, activities, and maturity level of most of those organizations.

Table 2. Institutional landscape for HTA in Asia

Organization type	Organizations	
Government HTA organizations	■ China: CNHDRC/NCMHTA ■ India: HTAIn ■ Indonesia: InaHTAC ■ Malaysia: MaHTAS ■ Philippines: HTA Council ■ Singapore: ACE	■ South Korea: NECA ■ Taiwan: CDE ■ Thailand: HITAP ■ Vietnam: HSPI ■ Nongovernment focal agencies: ■ HTA Forum, Pakistan
Academic and research institutions	■ NUS, Singapore ■ Universiti Sains Malaysia Discipline of Social and Administrative Pharmacy, Malaysia ■ CHEPS, UI, Indonesia	■ Tata Institute of Social Sciences, India ■ National Health Insurance Policy Consulting Committee Task Force on HTA, Vietnam ■ University of Queensland
Regionally focused HTA organizations, platforms, and units	■ HTAsiaLink ■ HITAP International Unit ■ ASEAN ■ WHO SEARO and WPRO	■ HTAi Asia Policy Forum ■ ISPOR HTA Roundtable–Asia Pacific

[3] This summary includes additional references identified during in-depth interviews. Some of these reference documents had already been identified by the assessment team during stage 1, some were new.

Organization type	Organizations	
International organizations supporting HTA in Asia	■ HTAi ■ iDSI ■ BMGF ■ Wellcome Trust ■ Atlantic Philanthropies ■ ADB ■ World Bank ■ WHO ■ National Institute for Healthcare Excellence, UK ■ ISPOR	■ INAHTA ■ RedETSA ■ EUnetHTA ■ Tetra Tech, Australia Indonesia Partnership for Health Systems Strengthening ■ Access and Delivery Partnership ■ PATH ■ Euroscan International Network

The HTAsiaLink membership roster includes many government organizations and academic and research organizations (HTAsiaLink Annual Conference).

In Southeast Asia, designated government agencies responsible for HTA management and oversight do not yet exist in Brunei, Cambodia, Lao PDR, or Myanmar. According to the WHO country HTA profiles, in most countries without an explicitly designated government HTA unit, the procurement unit within the ministry of health (MOH) is responsible for processes and systems most closely related to systematic decision-making about pharmaceutical products and medical devices.[4] Brunei expects to establish an HTA agency within the next three to five years. In South Asia, Bangladesh, Pakistan, and Sri Lanka have not designated a government agency to oversee HTA. In Nepal, responsibility for HTA oversight is distributed across several agencies, depending on the type of product or intervention being assessed. Bhutan has a formalized process for decision-making based on HTA output, however, the process is not centralized within a specific government agency (WHO 2021a-i).

The WHO country HTA profiles[5] referenced above provide a general perspective on the degree to which HTA has been institutionalized in countries. However, these profiles are short, tabular presentations of yes/no responses from country MOHs to a 2020/21 survey that do not provide sufficient information to assess HTA maturity. Several references addressed country-specific HTA landscapes (Downey 2017; Gamage 2020; Hafeez; Hoang 2021; Roza 2019; Sastroasmoro 2018; Sharma 2020; Shi 2017). A larger group of references described the state of HTA landscapes from a cross-country perspective, providing some general insight on maturity and development needs (Babigumira 2015; Castro Jaramillo 2016; Ciani 2012; Chootipongchaivat 2016; Kim 2021; Kumar 2022; Rajan 2011; Sharma 2021; Suharlim 2022; Teerawattananon 2021; Teerawattananon 2019; Thorat 2015).

CHALLENGES AND NEEDS FOR HTA INSTITUTIONAL DEVELOPMENT

The literature indicates that Asia's HTA landscape is rich. It is also evident that, given the heterogeneity of health systems and HTA systems, application of HTA varies across the region. Three tiers of countries are identifiable. In countries with more mature health systems, HTA application is generally

[4] It was noted that HTA can be and often is also applied to health interventions. The WHO country HTA profiles did not reference organizational responsibility for management and consideration of such HTA processes and output.
[5] WHO Health Technology Assessment Survey 2020/21. See summary report at: https://www.who.int/data/stories/health-technology-assessment-a-visual-summary

broad, management of HTA systems is more firmly institutionalized, and HTA is more solidly embedded as a tool for decision-making. The middle tier includes countries where a stronger HTA institutional base is emerging and where the political economy is reasonably supportive. By and large, these countries also have a strong commitment to UHC. The final tier includes countries where HTA has not yet been institutionalized and where HTA application and using results in decision-making is mostly ad hoc.[6] If better coordinated, the institutional landscape for HTA presents opportunities for mutual assistance among countries, something a hub could theoretically do. (This was explored during in-depth interviews; see Findings from In-depth Interviews section.)

APPROACHES TO SUPPORTING HTA DEVELOPMENT

Current efforts in Asia to support country-level development of HTA environments may be described as bottom-up and ad hoc. That is, as countries express needs, technical assistance is mobilized through regional or global HTA experts and projects (HTA Unit, Philippines DOH, 2020; Indonesia HTA Committee, 2017). Some program efforts designed around specific topics and then applied in willing countries often relate to technical topics, such as economic evaluation methods and adaptive HTA. MTaPS did not find references to similar program-oriented approaches to fostering HTA institutional development or to deliberative aspects of the HTA value chain. Several references were found that provided detailed descriptions of country-level HTA development needs (Pwee 2009, Sastroasmoro 2018, Sharma 2020, Wasir 2019).[7] The in-depth interviews conducted were therefore designed to enrich our knowledge about country needs for HTA growth and development, particularly beyond technical "doing" aspects.

In Asia, HTA development also occurs as a byproduct of existing networking mechanisms. Much of the networking occurs in the context of planning and convening HTAsiaLink's annual professional conferences. Connections established during the conferences lead to ad hoc collaborations. The main limitation expressed by key informants is that attendance at these important events is limited mostly to HTAsiaLink members. Although a broader set of policymakers and other public stakeholders are also invited to attend, the conferences draws fewer from the potential HTA constituency of "unconvinced" policymakers and regulators. The section describing in-depth interview findings will discuss further the need to better reach these stakeholders.

A central objective of the e-survey and in-depth interviews was to identify specific parameters of demand for potential hub support.

FINANCING FOR HTA SYSTEMS AND FOR DEVELOPMENT SUPPORT

MTaPS did not find literature that addressed the question of how a hub might be financed. This topic was included in the guidelines developed for the in-depth interviews.

[6] These distinctions in HTA ecosystem development are general in nature. As country level systems are multifaceted and in a dynamic state of development, comparisons will vary by system components and over time.

[7] Additional reference material likely exists, either in the formal or gray literature, that the study team did not identify during this assessment.

FINDINGS FROM THE E-SURVEY

MTaPS received 25 responses (19 complete and 6 partial) from respondents in 10 countries (table 3). No responses were received from respondents in the following target countries: Bhutan, Brunei, Cambodia, Lao PDR, Myanmar, Nepal, Pakistan, Sri Lanka, and Thailand. Nearly half (11, 44%) of respondents identified themselves as technical experts. Six (24%) identified themselves as administrators, two (8%) as advocates, two (8%) as policymakers, and one as a health care provider.

Table 3. Country origin of survey respondents

Country	Frequency	%
China	1	4
India	1	4
Indonesia	3	12
Japan	1	4
Malaysia	2	8
Philippines	5	20
Singapore	4	16
South Korea	2	8
Taiwan	1	4
Vietnam	3	12
Multiple	2	8
Total	25	100

Respondents worked at various types of organizations, with nine (36%) from a ministry or department of health (DOH), eight (32%) from an academic institution, two (8%) from a research institution, two (8%) from a health care provider organization, and one (4%) from a technical assistance organization.

ORGANIZATIONAL AND COUNTRY NEEDS FOR HTA STRENGTHENING AND SUPPORT

Expressed need for HTA strengthening and support was high (table 4). Seventy-six percent (19/25) of respondents stated that their organization's needs were high or medium and 81% (17/21)[8] described their country's need as high or medium. The types of needs were distributed across the range of response options provided, with most selecting technical skill-building and development of policy, guideline, processes, and tools within their top three needs. Other needs identified were monitoring and documenting HTA impact; regional collaboration; learning opportunities; how to finance HTA research, management; translating HTA research for decision makers; translating HTA results for health care providers and managers; general HTA knowledge building; institutional development; how to use HTA results in decision-making; and how to appraise HTA research.

[8] Different totals to discount the four respondents with incomplete survey responses.

Table 4. e-Survey respondents' perception of need for HTA strengthening and support

Country	High need	Medium need	Low need	No response	Total
China	1				1
India	1				1
Indonesia	1		1	1	3
Japan	1				1
Malaysia	1		1		2
Philippines	3	1		1	5
Singapore	1	1	1	1	4
South Korea		2			2
Taiwan	1				1
Vietnam	3				3
Other			1		1
Multiple				1	1
Total	13	4	4	4	25

ORGANIZATIONAL AND COUNTRY ABILITY TO SUPPORT AN HTA HUB

When asked about prospects that their organization or country could contribute to an HTA hub organization, many responded in the affirmative. The top categories of support they could provide were general knowledge building (15 respondents); development of policy, guideline, processes, and tools (12 respondents); and technical skill-building (10 respondents).

RESPONDENT PERSPECTIVES ON HUB ACTIVITIES

When asked their opinions about the potential value of an HTA results catalogue[9] and a cost database,[10] 90% of respondents thought an HTA results catalogue would be useful, and 81% thought a cost database would be useful. For both the results catalogue and the cost database, 7 (28%) respondents said that there would likely be barriers to including their country's HTA results or sharing their country's costing data. The concerns about sharing HTA results included generalizability of results to other countries, legal barriers, and administrative and management impediments. For costing data, there were concerns about confidentiality, that sharing might be controversial, and that data may not be transparent.

MTaPS also asked the survey takers what activities a regional HTA hub should prioritize. Five response groups emerged: database and catalogue development, learning forums and opportunities, technical strengthening, institutional and organizational development, and regional research. Detailed information on demand for HTA support and strengthening are discussed in the in-depth interview findings section.

Respondents were asked to provide perspectives on desired HTA hub characteristics. The majority thought it important that a regional hub possess strong HTA research and technical assistance experience. The hub organization should also have knowledge and experience in HTA organizational and policy development and HTA decision-making. Respondents also believed that having a connection to an international HTA network or organization is important and that a hub organization should be able to support countries from a non-imposing perspective of mutual respect for their capacities and priorities.

[9] An HTA result catalogue is defined here as a compendium that captures and summarizes HTA studies and some form of their results and is made available to others to inform decisions about similar technologies.

[10] A cost database is defined here as a compendium that captures information from various health systems and countries about the costs of specific health technologies, including products, services, and health interventions.

Existing organizations and platforms named as potential hub candidates were HTAsiaLink, HITAP, NECA, ACE, and MaHTAS.

Although respondents provided valuable thoughts through the e-survey, the in-depth interviews were critical to obtaining a more complete picture of the HTA environment and demand for support.

FINDINGS FROM IN-DEPTH INTERVIEWS WITH KEY INFORMANTS

Table 5 summarizes the countries and affiliations of the 28 voices captured in 21 in-depth interviews.

Table 5. Countries and organizational types represented in in-depth interviews

Country	Donor agencies	HTA practitioners in Asia	Implementing/technical assistance agencies	Other hubs	Total
Indonesia		1	1		2
Malaysia		1 (3)*			1 (3)*
Philippines		1			1
Singapore		1			1
South Korea		1			1
Taiwan		1			1
Thailand		2 (5)*			2 (5)*
Vietnam		1			1
Other	4 (5)*		1	2 (3)*	7 (9)*
Multiple			4		4
Total	4 (5)	9 (14)	6	2 (3)	21 (28)

* Number outside paratheses indicates the number of individual interviews conducted; number inside the paratheses indicates the total number of persons (key informants) that participated in those interviews.

Demand for increased intraregional support for HTA development is clearly strong. As noted earlier, key informants generally perceive that a de facto HTA hub already exists in Asia. Together, HTAsiaLink and its secretariat organization (formerly South Korea's NECA and currently, Thailand's HITAP International Unit) have essentially functioned as the HTA hub for the region. HTAsiaLink provides a widely recognized and much-used networking platform for regional HTA practitioners and organizations. HTAsiaLink also connects the Asia HTA community to global HTA resources and platforms. HITAP was described by key informants as a "powerhouse" for HTA support throughout much of the region, mostly with respect to Southeast Asia, but also extending some technical assistance support in South Asia.[11] That said, key informants said that there are unmet regional needs; those will be elaborated in section B. The rest of the report refers to what key informants consider to be the current, de facto HTA hub in Asia as HTAsiaLink–HITAP.[12]

[11] It is noteworthy that HITAP is extending its support and expertise to Africa and is seeking to promote two-directional learning between Asia and Africa HTA stakeholders.

[12] Note that HTAsiaLink's secretariat recently changed from NECA (Korea's HTA agency) to the HITAP International Unit (a unit in Thailand's HTA agency). There is no set period for an agency to serve as HTAsiaLink's secretariat; at some time in the future, another regional organization may assume the secretariat role. The hub would then be considered HTAsiaLink along with the organization fulfilling the secretariat role.

Almost universally, key informants stated that it is imperative that discussion about institutional fit as the region's HTA hub and its activities be grounded in a clear definition of and consensus about the hub's purpose. Clear definition of purpose is, in turn, a necessary input into considering how the hub's organization is to be structured and activities defined. Determining a hub's financing needs and opportunities is the logical next step after defining purpose, structure, and technical strategies and activities. The findings from the in-depth interviews with key informants are organized as follows:

- Section A: Purpose and priorities of an HTA hub for Asia
- Section B: Activities for the hub to undertake
- Section C: Organizations that could contribute technically to the hub
- Section D: Options and prospects for financing an HTA hub in Asia
- Section E: Hub's engagement with countries and HTA organizations in the region
- Section F: Advice on structural considerations for the hub
- Section G: Technical support that may be tapped by the hub organization

A. DEMAND FOR HUB SUPPORT: DEFINING PURPOSE AND PRIORITIES FOR AN ASIA HTA HUB

There is wide agreement among HTA stakeholders in Asia that responding to credible demands (i.e., not supply-driven by funders or other interests outside the region) should guide the structure of an HTA hub. However, informants expressed a range of opinions about what the purposes and priorities should be. They also agreed that the hub will derive its legitimacy from perceived responsiveness to members' demands. In turn, perceived credibility contributes to the hub's sustainability. Several decisions will need to be made to define the purpose:

- What balance should be sought between serving ad hoc, country-specific needs and regionally defined goals?[13]
- Should participant groups be narrowly or broadly defined? Should a phased approach to expanding a hub's participant reach be considered?
- To what extent should the hub's function be driven by its form or, alternately, to what extent should its form be driven by its function?
- What time period should initial hub purpose, priorities, and objectives cover?
- What geographic range should the hub seek to serve? Options include Southeast Asia, South Asia, East Asia, the Pacific Islands, and Central Asia. Should coverage be limited for some initial period and expanded thereafter? At what pace?[14]

[13] Defining vision and purpose and then defining hub programs and country support agendas requires a firm understanding of country HTA landscapes. Country stakeholders were articulate in defining general HTA systems' shortcomings. However, systematic assessments were not identified, particularly for countries most in need of a hub's support. Key informants said that it will likely be necessary to assess individual countries more formally to translate hub purpose into relevant hub programs and activities.

[14] Key informants generally agreed that Southeast Asia should form the core of the hub's coverage area, with South Asia being a closer fit than Central Asia or the Pacific Island nations. Key informants recognized that East Asian countries (i.e., Taiwan, South Korea, and to a lesser extent, Japan) have historically participated in HTA systems and capacity development, particularly in Southeast Asia, and do have formal representation in the HTAsiaLink network. As such, it is likely they would and should continue to play a role in any regional HTA development efforts through a more formally constituted HTA hub for Asia.

To achieve the goal of being demand-driven, key informants advised that, early on and periodically thereafter, the hub should engage members to map changes in expectations. They also advised that hub planners should seek out the voice of stakeholders who are not convinced about the value of HTA. Box 2 summarizes key informants' top priorities for an Asia HTA hub's purpose.

Box 2. Hub Purpose: Top Suggestions

- HTA human capacity development
- Strengthening HTA political commitment
- Supporting use of HTA for UHC and N/SHI
- Promoting harmonization across the full range of an HTA system

1. Build human resource capacity for HTA covering the full range of an HTA system. This should include deliberative and managerial HTA functions as well as analytic capacity. Key informants considered this to be the topmost priority for strengthening the HTA landscape in Asia. They expressed a strong desire to see a coordinated, regional approach to HTA capacity building that could augment multiple, independent, country-specific strategies. Of particular interest are more and better planned opportunities for cross-institution and cross-country learning. Sub-purposes expressed include:

a. Raise each country's human resource capacity for HTA to a minimum level to reduce regional capacity imbalances. This implies that the plan should focus on countries that fall below some minimum standard.
b. Raise the HTA technical and organizational training capacity in each HTA hub member country to a minimum standard that sets it on a path to becoming self-reliant in HTA landscape development.

2. Focus on strengthening the political economy environment for HTA systems development. In particular, garner support at senior health-sector leadership levels and among allied senior-level policymakers (such as health insurance reimbursement agencies, government planning agencies, and finance ministries). Expand the regional and country dialogue beyond the already-committed HTA community. The goal would be to expand awareness about HTA and its potential value and generate better political commitment. As a tool to support this, the hub should build an evidence base of HTA impacts. Impact areas to measure include population access to health services, health practices, disease epidemiology, health care provider practices, and health care and health systems costs.

3. Ground the hub's purpose in using HTA to support UHC and N/SHI country agendas. Commitment to UHC and N/SHI increases demand for evidence, including from HTA, to drive decision-making about benefit packages. UHC and N/SHI form a common thread across several countries in the region and may be an easier way to approach policymakers regarding HTA and its value.

4. Promote regional and within-country alignment across the full range of an HTA system by better connecting HTA technical experts, policymakers, regulators, and health practitioners. Harmonization across an HTA system was a frequently noted need. Regulators need to be better aligned with policymakers and vice versa; policymakers need to be better aligned with HTA researchers and vice versa; all need to be better aligned with health care provider and patient communities. Achieving high levels of harmonization requires political commitment and coordination beyond the HTA environment. Key informants suggested that harmonization be pursued at two levels:

- Across countries: Some felt strongly that a hub should pursue better regional harmonization in how HTA is defined and on how and for what health system purposes HTA output should be used. This

may be a tall challenge in Asia given that, unlike EUnetHTA, which has a mandate from a regional body (the EU Commission), a hub in Asia will need to rely more heavily on its own credibility and persuasive ability.[15] There is considerable diversity across the region's countries in what is considered to be sufficient HTA quality, the degree to which HTA is used in decision-making, and what countries view as priority topics as subjects for HTA.[16]

- Within countries: Key informants stated that seeking harmonization at the country level, where patients are most affected by misalignment, may be more practical and meaningful. They also advised that the country level would be more fertile ground for affecting quality of care, health care outcomes, and patient health. A country-level harmonization agenda might start, for instance, with development of a regional reference case on how to achieve harmonization across a country's HTA system, from research to policy, from policy to regulation, and from regulation to practice and evaluation.

Several other possible hub purposes were mentioned by key informants but with less consensus on their importance to immediate regional needs:

- Establish and strengthen existing data and resource exchange systems to promote regional sharing of HTA materials and resources while each country maps and creates plans to strengthen data systems needed to feed HTA and, meanwhile, to compensate for data and evidence gaps.
- Broaden the range of topics covered by reference case materials produced in and relevant for the region or for individual countries in the region.
- Establish and support communities of practice for subsets of HTA skill areas (e.g., technical doers, systems managers, HTA translation experts, deliberative process experts).
- Support use of HTA for decision-making in quality assurance.
- Serve as a technical assistance connection hub only, connecting countries and members to technical assistance resources as needs are expressed.

These various purposes are, of course, not mutually exclusive, and some combination could be pursued. In fact, several key informants proposed that a multipronged approach to purpose would be more useful than a limited single-purpose approach. For instance, building HTA human resource capacity without strengthening demand for HTA output among decision-makers might be inefficient and counterproductive. However, a compound purpose would require a more complex organizational and financing structure for the hub compared to a single-purpose hub. Key informants suggested that the hub could define a multipronged purpose that phases elements in over defined medium- and long-term periods. This would allow the organization to build the technical and financing base necessary to support an increasingly complex purpose and program.

[15] From the outset, harmonization of HTA definition and application across its region was one of EUnetHTA's central goals. Even with an EU Commission mandate behind it, this was said to have been a challenge.

[16] Two key informants referenced an ASEAN initiative to produce a framework to harmonize regional approaches to studying clinical efficacy and effectiveness. Further investigation of this initiative would inform consideration of what might be useful for a hub to support.

B. DEMAND FOR HUB SUPPORT: USING "PURPOSE" TO DEFINE HUB TECHNICAL STRATEGIES AND ACTIVITIES

MTaPS found two HTA hub program models (box 3) that could be of interest for an Asia HTA hub. The EUnetHTA model consists of a series of joint action projects that network members could participate in voluntarily. Each joint action project was designed to serve a specific purpose, such as strengthening the application of HTA methodologies (sometimes in specific settings, such as hospitals); to strengthen data systems that feed HTA; to strengthen deliberative aspects of the HTA process; and to support HTA institutional development. An overarching objective was to set minimum standards for doing and using HTA and to harmonize those standards across the European region. This latter overarching objective was described as challenging to achieve and just partially met. This model would not be replicated easily in Asia, largely because the EUnetHTA program was applied in a region with mostly high- and upper-middle-income countries and because the EUnetHTA programs are backed financially and politically by the regional governmental body.

Box 3. Two Models for HTA Hub Programming

EUnetHTA: A series of regional joint action programs, each with a distinct purpose; member participation is voluntary; requires 40% co-financing

RedETSA: Maintains an ongoing multipronged program agenda open to all members; implementation and financing mostly supported by PAHO

The RedETSA program agenda, technically supported by its secretariat within PAHO, provides a more relevant model for an Asian regional HTA hub's activities. Their activity streams include capacity building, HTA institutionalization, and information exchange and dissemination.

- **Capacity building:** An array of HTA e-learning courses is offered to members through PAHO's Virtual Campus for Public Health. These include introductory HTA courses and courses on rational use of technology and health technology planning and management. RedETSA–PAHO collaborates with several academic institutions throughout the Americas to produce and deliver these courses. PAHO manages a scholarship fund to support members to attend graduate and postgraduate degree programs in HTA and economic evaluation, evidence-based medicine, health decision-making, and real-world evidence. RedETSA–PAHO also supports technical exchange programs among member countries.
- **HTA institutionalization:** Regional maps on HTA systems and capacities are maintained and progress is monitored. As part of its mapping, rational use of HTA output in member countries is tracked.[17]
- **Information exchange and dissemination:** The hub supports development of country networks and acts as a catalyst for intra- and intercountry collaboration. The hub has also created BRISA (La Base Regional de Informes de Evaluación de Tecnologías en Salud de las Américas), an electronic system cataloguing completed HTAs in the region and their results. Its effort to drive minimum quality standards for HTA reports is a work in progress.

RedETSA–PAHO seeks to address challenges including better integrating Caribbean countries into the network, improving the availability of local data for HTAs, and continuing to raise the quality and

[17] Note that according to key informants a similar HTA institutionalization tracking system is being initiated by ASEAN with leadership from the Philippines.

standardization of HTA reports. Its work plan includes new initiatives to update the current version of BRISA, develop a repository of economic models and HTA methodological manuals, create a new database on regional health care unit costs, strengthen its webinar program, and conduct a workshop on the linkage between HTA and decision-making. It also seeks to expand its technical exchange program.

Resource material about an HTA hub that is emerging in Africa was not found for this assessment.

Key informants provided the following advisory points for those who may be considering development of a work plan for any HTA hub:

1. Design a process that ensures that selected strategies and activities clearly align with the chosen hub vision and purpose (section A).
2. Do not "over engineer." There are two considerations here:
    a. Be modestly ambitious at the outset until it is clearer what human and financial resources are going to be available initially and on a sustained basis. It may be that initial financing realities will not support hub activities much beyond what is already being done by the HTAsiaLink–HITAP regional support system.
    b. Favor activities that the hub organization itself can implement and sustain. Be cautious when considering activities that require external technical consultants to complete as the hub organization may find it difficult to continue once consultants withdraw.
3. Require credibility building as a central criterion for selecting activities to be undertaken by the hub. Credibility will more likely accrue if activities selected (a) have a high likelihood of succeeding, (b) respond to a real demand from members, (c) are activities to which members have a long-term commitment, and (d) have a demonstrable impact on HTA development in the region.
4. Link implementation to respected institutions in the region. Early on, consider engaging an academic institution that has an established reputation across the breadth of HTA systems (including not just technical HTA methods but also policy formulation and implementation).[18]
5. Be cautious about adopting a "quick win" approach to early activity selection, particularly those that require support from external technical resources and those that require ongoing support once the initial quick-win output has been produced (see point 2 above). A focus on quick wins may undermine attention to more important organizational development needs. This can have the impact of eroding longer-term prospects for organizational success and sustainability. Key informants did suggest one caveat to this perspective. If the quick win is a public good for which there is high regional demand and producing it would lend credibility to the hub, it may be reasonable to carry out the activity as part of a dual strategy. Some effort given to the production of public goods could complement strictly protected resources devoted to organizational and strategic development.
6. Define a balance between staying focused on implementation of a strategic plan and being responsive to calls for support, for instance, during health emergencies. Also, maintain an awareness of shifting priorities of hub constituents and financers. Tension that occurs at the country level would impact a

[18] Most frequently referenced academic institutions in Asia mentioned by key informants were National University of Singapore (NUS) and Thailand's Mahidol and Chulalongkorn universities.

regional hub's program as members shift focus from ongoing hub-supported activities to support country policy needs perceived as urgent.[19]

Guiding principles suggested for work plan development include joint leadership of the work planning process, clear commitment by those involved, encouragement of collaborative approaches, and avoidance of duplication of other regional HTA support. With these advisory considerations in mind, table 6 organizes the range of hub activities suggested by key informants. The capacity-building topic elicited the most extensive set of proposed activities, while increasing political support for HTA received the second highest number of proposals. Blue highlighted entries in the table indicate activities in strongest demand and which key informants considered feasible for immediate implementation.

[19] For instance, key informants from several countries described interruptions in HTA systems due to the need to respond urgently and rapidly to support COVID-19 decision-making needs.

Table 6. Menu of desired hub activities expressed by key informants (blue text indicates activities in strongest demand)

HTA capacity building	Political economy development
Develop and implement capacity building strategies: ■ Produce a technically and geographically integrated, regional HTA human resource development strategy. ■ Map the HTA higher education and continuing education landscape in the region. ■ Appoint a respected academic institution in the region to coordinate strategy development and implementation.	Promote participation in learning venues: ■ Create a scholarship fund for "unconvinced" policymakers to attend HTA and allied professional conferences. ■ Convene HTA-focused consultation and discussion forums specifically for senior government health and allied sector leaders. ■ Bring "convinced" stakeholders into more formal contact with "unconvinced" stakeholders. ■ Make it easier for nonmembers to attend the annual HTA regional conference.[20]
Develop HTA professional support mechanisms: ■ Establish cross-country and intracountry mentorship networks. ■ Create a scholarship fund to support in-country and cross-country HTA internships, visiting scholars, and staff exchanges. ■ Establish continuity-of-support programs for new HTA degree graduates, such as coaching programs that connect young professionals within countries and across countries with mentors. ■ Create community-of-practice networks for HTA skill area subsets. ■ Foster bridge-building across the full range of an HTA system with a short-term exchange program for HTA technicians, administrators, regulators.	Support HTA advocacy: ■ Train health advocacy and patient/consumer organizations on HTA; assist them in developing HTA-focused advocacy strategies. ■ Support development of mechanisms for patient and provider inclusion in HTA deliberation processes; train patients and providers for this role. ■ Identify, train, and support an HTA advocate within MOHs. ■ Produce and apply a framework for regionwide and country-level HTA impact evaluation; use results to support other initiatives to build political support for HTA. ■ Create policymaker-friendly documents and materials to aid in socializing the broader policy leadership environment to the importance and value of HTA.
Promote HTA training: ■ Produce a regional bank of virtual and e-learning continuing education webinars and courses covering the full range of an HTA system. ■ Provide degree training opportunities specifically for career government workers/functionaries. ■ Train country-level HTA trainers. ■ Create a regional accreditation program for country-level HTA degree programs; create a regional HTA professional certification. ■ Create online master's level programs in HTA doing and using. ■ Develop an online infectious disease modeling course.	Reward policy and finance commitments to HTA: ■ Create a regional HTA leadership awards program for HTA and non-HTA professionals.
Augment and support existing technical assistance mechanisms: ■ Program for country-to-country technical assistance.	

[20] Nonmembers seeking to attend the annual HTAsiaLink conference must obtain approval from a Board of Directors member. Alternately, their organization can apply for an organizational membership which would then confer on that organization's members the right to attend the conference. (Note that organizational membership is not permitted for for-profit organizations.)

■ Explore the pharmaceutical industry as a potential source for HTA capacity building.	
UHC, N/SHI support	**Information systems support**
■ Produce a reference case guidance document on using HTA in benefits package design. ■ Create a fund to pay for health payors and reimbursement agency leaders to attend HTA professional development conferences and forums. ■ Create in-country and cross-country HTA dialogue forums specifically for UHC and N/SHI benefits package decision-makers and reimbursement agency staff.	■ Undertake a formal lessons-learned inquiry about other regional and global HTA information databases. Use results to strengthen existing regional databases (e.g., GEAR). Add a curating element to the database. ■ Map country data needs and gaps; produce country plans for closing gaps and, in the short-term, compensating for them. ■ Increase support for adaptive HTA capacity building. ■ Create a regional database for country-level health care and health system costs and prices. ■ Develop free- or low-cost alternatives to current, more sophisticated software for conducting HTA.
Production of public goods	**Cross-cutting activities**
■ Support development and dissemination of a meta-guidance tool for creating country-level HTA guidelines (an initiative underway as a joint effort by HTAsiaLink, HTAi, and ISPOR). ■ Assemble a library of reference cases covering all components of a country HTA system; produce new reference case documents to fill gaps (e.g., harmonizing across a country HTA system, patient participation in HTA, etc.). Create an alternative to the Asia-EQ5D software (initially funded by Japan).	■ Convene learning dialogue events with other regional hub organizations to exchange best practices for hub organizational development. ■ Increase the number of formal HTAsiaLink regional networking events. ■ Relieve the financing burden on the host country for the annual HTAsiaLink conferences. ■ Create a grants program to support implementation of unsolicited activity proposals from hub members, especially those that promote intracountry and regional harmonization. ■ Conduct HTA impact evaluation; produce an HTA investment case tool. ■ Conduct joint action HTAs on topics of regional priority (e.g., vaccine passports).

HTA capacity building: Several points about capacity-building activities are salient. First, HTAsiaLink already contributes to HTA capacity building through self-motivated networking that occurs as a byproduct of its annual conferences. Several key informants expressed the opinion that while this is particularly useful, a more intentional approach would better meet regional demand. Second, there is uneven access to HTA capacity building across countries in Asia. Certainly, the number and range of capacity-building initiatives is increasing both at academic degree and continuing education levels. Academic degrees in HTA and allied disciplines are established in Singapore, Thailand, Malaysia, Philippines, and India, and perhaps more that were not identified during this assessment. Some countries, such as Malaysia, have well-defined, multi-year and multi-dimensional HTA capacity-building and human resource development strategies. Other countries have less well-developed HTA capacity-building plans.

Third, there is general agreement that the region would benefit from a more coordinated and integrated, regionwide approach to HTA capacity building to address the first two points.[21] Finally, key informants cautioned that countries should be supported to strengthen their own HTA capacity-building systems. Countries where training infrastructure (i.e., institutions, training professionals, trainee supply) are weak will need more support until their training environment improves.

Political economy development for HTA: Key informants expressed this as a close second priority for regional HTA development. The need is to (a) move the decision-making environment to a place where more decision-makers are open and ready to use HTA output and (b) comprehend the value HTA offers to prioritizing use of limited resources, strengthening health systems, and hastening progress toward UHC. An extension of this priority is the need to transform rising political support into policy and regulatory framework development that institutionalizes HTA and creates a sustainable financing base for HTA systems. In many countries, improved structures and mechanisms are needed through which HTA output can be used in decision-making. Short of investing in activities that achieve these objectives, efforts to build HTA technical and managerial capacity may fall short of its expected impacts.

Developing public goods: A range of public goods investment opportunities were recommended by key informants—chief among them being reference cases.[22] This synergizes well with regional needs identified by HITAP to produce a document that guides countries through the process of producing their own reference case guidance documents along the full range of an HTA system. An Asia-specific HTA results catalogue already exists: GEAR Online Research (GEAR (gear4health.com)), created and maintained by HITAP. Strengthening this database is another public good worthy of investment. Although key informants agree on the value of creating a regional database on health care costs, many believed it would have limited utility, given country differences in health systems, structures, and costs.

[21] The HTAi Asia Policy Forum devoted its November 2022 meeting to HTA capacity-building needs and prospects in Asia (HTAi, 2022).

[22] This could build on efforts ongoing in Asia for development of guidance documents about real-world data collection and use, and a reference case for economic evaluation of precision medicines. Plans are also in place to develop additional reference cases including for example evaluation AI/digital health. Such initiatives are being supported by HTAsiaLink, ISPOR, HTAi, HITAP, NUS, and others.

C. ENTITIES IN ASIA FOR A REGIONAL HTA HUB

Key informants discussed existing organizations within Asia that are already serving some of the functions of a regional hub. It was clear that key informants consider the nexus of HTAsiaLink and its secretariat to be operating as the region's hub. For about a decade, NECA served well as HTAsiaLink's secretariat before it handed that role over to HITAP in 2022. That nexus as now configured is hereafter in this report referred to as HTAsiaLink–HITAP. Key informants mentioned other organizations that could contribute or provide complementary support to a hub; these include South Korea's NECA, Singapore's NUS, Malaysia's MaHTAS, and Taiwan's CDE. This section presents the opportunities and challenges of each organization, presented from key informants' perspectives.

HTAsiaLink

Established in 2011, HTAsiaLink is a network organization of HTA agencies, academia, and not-for-profit organizations in the region. It was established based on mutual understanding of the need to build regional HTA capacity. It organizes one of the largest annual HTA professional networking events in the Asia-Pacific region. HTAsiaLink has a nine-member board of directors, seven elected from among member countries, a president, and a representative from its secretariat organization. Serving on the board and as the secretariat is voluntary. Decisions regarding HTAsiaLink activities are made through deliberation and discussions among the board of directors and through consultation with network members. HTAsiaLink is not linked directly to finances for its activities. Any change to financing arrangements would require agreement by the board of directors and likely, changes to the by-laws.

Its secretariat recently transitioned from NECA in South Korea to HITAP in Thailand. HTAsiaLink is well-known and respected. The annual HTAsiaLink conferences are a platform for successful knowledge exchange and networking. From this perspective, it has been fulfilling an important function expected of a regional hub. As described by key informants, the strengths, opportunities, and challenges of HTAsiaLink serving an expanded hub role are outlined in table 7.

Table 7. Strengths, opportunities, and challenges of HTAsiaLink as the Asia HTA hub

Strengths and opportunities	Challenges
■ It is a known and trusted regional networking hub. ■ Members share a sense of ownership of the organization. ■ Its convening power is an important asset; its annual conferences provide a natural environment for sharing HTA best practices and lessons learned. ■ Its bottom-up, consensus-building, and regionally driven approach to governance is successful. ■ It uses its platform to promote members' interests and to disseminate important global HTA advances and resources. ■ It facilitates engagement with global experts beyond the Asia region to promote learning and collaboration. ■ It reviews and endorses proposals from members for regional projects.	■ Its secretariat's funding base depends on its host agency. ■ Its governance structure may need modification to serve a more complex program structure. ■ Its network consists mostly of convinced HTA experts; it would be useful to better capture the attention of important, unconvinced senior health-sector stewards. ■ Its technical assistance focus is stronger for technical HTA doing; using aspects could be better developed. ■ It does not yet have a funding base for program development and support.

HITAP

Through its International Unit, HITAP has an established reputation as an HTA technical assistance provider, primarily in the Asia region. It has supported several countries in the region, including Bhutan, India, Indonesia, Lao PDR, Philippines, and Vietnam on institutional development; technical training (including on-the-job and scholarships for higher education degree programs); and completion of HTA studies. HITAP sees itself as a connector among countries to tap and complement differing areas of expertise for HTA workshops and capacity-building efforts. HITAP recently assumed the secretariat role for HTAsiaLink, and together, the two organizations are considered to be acting as Asia's HTA hub. They are well-respected and have built credibility in the region. They promote regional interdependence, as opposed to pulling in support from outside of the region. They respect the diversity of HTAsiaLink members and have insight into the contextual differences among countries. The strengths, opportunities, and challenges that informants identified for HITAP are outlined in table 8.

Table 8. Strengths, opportunities, and challenges of HITAP as the Asia HTA hub

Strengths and opportunities	Challenges
■ It is a powerhouse for HTA in Asia and already provides hub-like technical assistance in the region. ■ It is considered an HTA technical center of excellence. ■ It recently assumed the role as HTAsiaLink Secretariat. ■ It offers the advantages of building on what already exists in Asia. ■ It complements HTAsiaLink's strong network engagement capabilities. ■ It has legitimacy, important and necessary connections, and the political will and commitment to do the work. ■ It has a standing, strategic alliance with NUS. ■ It has strong regional and global relationships with the range of actors and organizations that support HTA development. ■ Its International Unit is staffed with professionals from several countries in the region (e.g., India, Nepal, Indonesia). ■ It maintains a database of regional HTA research output (GEAR) and a library of policy briefs and guidelines.	■ Its domestic work is financed by Thailand's government. Its international technical assistance has been financed by a range of organizations by way of the International Unit's designation as a charitable foundation. It cannot accept funding from the for-profit sector. ■ There is a perception to be counteracted that HITAP works for the Thai government. ■ As a government-linked organization, there may be limits to its capacity to function in a hub role. ■ Broad regional diversity requires significant effort to achieve and maintain inclusiveness in regional HTA development decisions. ■ The doing aspect of HTA is perceived as being well-supported in the region. There is a perception that the region would benefit from increased emphasis on the using aspects of HTA to translate HTA output into policy.

Other HTA entities

Key informants also recognized several other Asian organizations and agencies as sources of HTA development support in the region. Below summarizes the thoughts from the key informants:

- **NUS,** particularly the Saw Swee Hock School of Public Health, is well connected and has the technical and financial muscle to contribute to an HTA hub. It is particularly interested in supporting an effort to create an integrated, regional strategy for HTA human resource capacity development. NUS works closely with HITAP; HITAP's founder, Dr. Yot Teerawattananon, is a visiting professor at NUS.
- South Korea's **NECA** is considered another HTA powerhouse in the region. NECA has recently been reorganized and has come through challenging funding times; it is still in the process of working

through these changes. Before HITAP, it was the HTAsiaLink Secretariat for 10 years. Its internal challenges, including reorganization and reconsideration of purpose and budget priorities, highlight a cautionary note about the challenges of locating a hub's secretariat inside an individual government's HTA agency.

- **CDE** in Taiwan also has the technical strength and regional knowledge to contribute to the regional hub. CDE is a member of EuroScan (www.i-hts.org) and is active in the international HTA landscape. CDE has also been a member of the board of directors of both HTAi and INAHTA.
- **MaHTAS,** Malaysia's HTA unit within its MOH, is highly focused on building comprehensive national HTA capacity. It is well connected to international experts and draws considerably on them for training support. It has produced a strategic plan for the country to build HTA human resources capacity, and it is committed to providing access to its training programs throughout the region. Additionally, MaHTAS encourages staff to participate in global interest groups and to learn skills along the full range of an HTA system. It is also working with the Association of Southeast Asian Nations (ASEAN) to harmonize HTA reporting formats on clinical efficacy and effectiveness across the region.
- **Philippines' HTA system** is overseen by the Health Technology Assessment Council (HTAC). The secretariat function recently transitioned from DOH to the Department of Science and Technology, and an HTA research network will soon be established to strengthen HTA by partnering with entities external to the country.[23] HTAC is well informed about the state of HTA in the region and has worked alongside HITAP and HTAsiaLink to strengthen its HTA system. It is also well positioned geographically between Southeast Asia and East Asia, is considered technocratic, and has strong English language capacity among its members. HTAC and DOH's HTA Unit work closely with PhilHealth, which is the national health insurance agency. The county has also established academic degree programs for HTA.
- **Indonesia's HTA system** is overseen by InaHTAC within MOH. InaHTAC is building formal relationships with a network of universities in the country to strengthen capacity to conduct HTAs and has recently produced a national priority list for topics to be subject to HTA. Efforts to increase public funding for HTA and HTA systems management are expected to bear fruit in the upcoming budget year, indicating an improving political and policy environment for HTA. HTA has also gotten the attention of the current health minister; he has directed that at least 15 HTA studies should be conducted annually. He also instructed that HTA nodes be supported in four or five universities not limited to the country's main island of Java. InaHTAC has actively engaged accordingly to support its ambitious goal of increasing the volume of HTA output. In addition, HTA leaders have been receptive to external support. An Indonesian served as the immediate past president of HTAsiaLink, giving the country's HTA leadership exposure to and familiarity with regional HTA needs and development.
- **China's HTA** landscape is complex and confronted by considerable coordination needs. China was designated to organize the 2022 HTAsiaLink Annual Conference but was unable to do so, largely due to strict COVID policies in place at the time. In the cooperative spirit of the HTAsiaLink network, other members were able to step in, postponing China's turn as the conference host until a later year. This led some key informants to suggest that China may have more of a supporting, and less of a leading, role in a regional HTA hub.

[23] See: https://news.abs-cbn.com/news/03/06/23/doh-transfers-operations-of-htac-to-dost

- **HTAIn** in India: Like China, India's HTA landscape is complex with 13 regional HTA agencies. The country is establishing better coordination mechanisms among these regional HTA agencies. Some informants noted that other South Asian countries may not accept HTAIn acting in a hub capacity, and it may be premature for the country to attempt to serve as a significant contributor to a hub.

HTA actors and systems have been supported by these Asian entities, and key informants expressed a preference to continue relying on regional support structures, though through a more formal and more diverse programmatic structure. Informants communicated that the organizations and agencies within the region can more readily recognize and understand contextual differences among countries than can entities from outside the region. With this understanding, they can better tailor approaches to support countries in the region. It also engenders a sense of ownership among this large network of Asian actors.

This section concludes by noting that several key informants mentioned ASEAN as worthy of further exploration as a source of HTA hub support, though it would face constraints in its ability to serve as a hub or its secretariat (Sharma 2021).[24] Through one of its health clusters, it is currently collaborating with several country HTA agencies in an effort to harmonize HTA reporting formats on clinical efficacy and effectiveness in the region. The health clusters support regional efforts to address emerging health threats and needs of vulnerable populations. Perhaps, through its health clusters, ASEAN has some potential advantages to supporting an HTA hub. It is a widely recognized and well-established entity supported at the highest political level of countries in Southeast Asia. Having its support would be akin to the advantages Europe's regional governmental body, the EU Commission, provides in support of EUnetHTA's programs. It might be a good platform, for instance, from which to operate regional joint HTAs for issues of wide, regional interest, such as health emergencies and pandemic response. Its main drawback is that, because it represents the Southeast Asian group of nations, its ability to support HTA hub activities outside Southeast Asia would be limited.

D. FINANCING POSSIBILITIES FOR AN ASIA HTA HUB

Key informants uniformly agreed that, in addition to the importance of having an adequate human resources base and commitment from leadership, the ability of a hub to obtain and maintain financing would be a determining factor to its sustainability and success.[25] A wider resource base to finance initiatives and activities could help diversify regional HTA strengthening activities. A second concern raised was the prospect that there could be tension between the hub and its funders in defining a hub vision, purpose, and work plan. Although it is important that the hub's purpose, agenda, and activities be responsive to locally determined needs and demands, funders likewise operate within accountability frameworks, which, in part, determine what they can support. It is therefore important that, from the start and throughout its lifespan, a hub have a good understanding of the boundaries of what funders can

[24] Key informants noted several constraints ASEAN would have to itself serving as an HTA hub agency or serving in the hub secretariat role in Asia. Chief among them is that ASEAN, as an entity, serves a set of countries limited to Southeast Asia. This is more limited compared to the broader set of Asian countries currently served, for example, by HTAsiaLink.

[25] Some key informants for this assessment raised a more elemental question about the value of regional HTA hubs from effectiveness and efficiency points of view. For those who conclude that the value of an HTA hub would be or is low, the question of hub financing is moot. MTaPS did not seek to make such a judgement. Rather, based on in-depth interviews we conclude that the perception in Asia is that an HTA hub does add sufficient value to regional HTA development to justify its existence and, therefore, financing it.

support and for how long. The hub will need to be able to articulate an endgame or exit strategy for funders, and, while HTAsiaLink has been self-reliant from the beginning, it will need to have a plan for maintaining self-reliance in the context of any expanded regional HTA strengthening program, especially regarding financing from bilateral and multilateral development agency sources. Outside funding sources for health sector support in Asia are already declining or undergoing redesign.

The current financing model for the annual conferences is currently sustainable; well-organized and well-attended conferences occur annually in member countries. Key informants did express some concern that the financing burden falls heavily on the host country. They would like to explore two changes to the current model, one that would more often lead to the conference being held in countries with lesser developed HTA systems,[26] and one that would increase the ability to open attendance to a wider stakeholder range.

This section describes key informants' perspectives on potential funding sources for an Asia HTA hub and its activities, along with prospects and challenges likely to be experienced in seeking to tap each source (table 9). First though, it is useful to describe financing approaches employed by three HTA hub or hub-like organizations (box 4).

Box 4. Financing strategies of selected hubs

- RedETSA: PAHO and grants
- EUnetHTA: 60%/40% EU and country government co-financing for each program
- INAHTA: Member dues and fees only

- **RedETSA:** This network was established in 2011, and, from the start, PAHO has provided the basic funding for RedETSA's secretariat. The secretariat is housed within PAHO's Health Technologies Assessment Unit of the Medicines and Health Technologies division of the Health Systems and Management Department. PAHO funding mostly supports salaries of several PAHO staff who devote part-time effort to carrying out secretariat functions. Some of the Medicines and Health Technologies division's budget covers program costs, such as travel by RedETSA members to annual meetings, support to RedETSA working groups, and planning and convening the annual regional HTA conference. Grants within and outside the region support some RedETSA programs and activities, including scholarships for attending capacity-building courses.
- **EUnetHTA:** The network was established in 2006 "to create an effective and sustainable network for HTA across Europe." Its goals are to facilitate efficient HTA resource use and promote HTA knowledge sharing and good practice of HTA methods and processes.[27] Joint action programs (there have been eight), its main vehicle for engaging with members, are co-funded by the EU Commission (60%) and from contributions from members participating in each program (40%).
- **INAHTA:** This global network's roots extend back to 1993. Its mission is to "provide a forum for the identification and pursuit of interests that are important to our member agencies."[28] Historically, it has relied entirely on member fees to support its activities.[29] The assessment team was unable to

[26] Key informants expressed the opinion that the financing burden of being the conference's host country is heavier than many countries would be willing or able to bear. It should be noted, however, that HTAsiaLink is committed to such inclusivity; it is considering having an upcoming annual conference hosted in one such country.

[27] European Network for Health Technology Assessment - Wikipedia; https://www.eunethta.eu/about-eunethta/

[28] https://www.inahta.org/

[29] A key informant reported that, at one point, INAHTA allowed new HTA agencies from LMICs to join its network free of charge for the first two years. MTaPS was not able to determine whether this policy is still in place.

secure an in-depth interview with INAHTA officers. However, their 2017-2020 and 2021-2024 strategic plans referenced their intention to expand their funding base by writing grant proposals, seeking funding from philanthropic organizations, and selling its products.[30]

None of these models is likely to be sufficient to finance a substantial uplift for Asia HTA hub activities. The likelihood that the RedETSA–PAHO financing model can be replicated in Asia is low.[31] The EUnetHTA financing model is not possible as there is no equivalent to Europe's regional commission arrangement. Also, unlike HTAsiaLink's members, EUnetHTA's members are high- and upper-middle income countries that have adequate resources to meet the 40% co-funding requirements. The main advantage of INAHTA's near total reliance on member fees is that it provides them with independence from outside interests. A substantial disadvantage is that the scope of the organization's activities is limited by its small revenue base. HTAsiaLink's current financing arrangements are geared mostly toward its annual HTA regional conference. That approach relies on the conference host country rotating from year to year. Host countries contribute in-kind labor to organize the event and resources to support venue-related costs. HTAsiaLink operations are largely related to board of directors' meetings and deliberations, which are covered by in-kind labor. Secretariat costs are likewise contributed via in-kind labor and associated material costs from the secretariat host agency (NECA previously, and now HITAP).

As summarized in table 9, key informants identified and discussed five potential sources for financing hub operations and activities. Each is accompanied by a unique set of prospects and challenges.

- **Bilateral and multilateral donor agencies:** Given the limited short-term prospects for substantial public funding from regional governments and from members, it was generally agreed that some degree of international financing, bilateral and/or multilateral, would be useful as an early source of support for a hub. The principal challenge expressed by key informants would be the need to maintain independence in determining hub priorities, programs, and activities. Also, from the start, the hub would need to plan for the eventual phase-down and phase-out of donor funding. It bears repeating that the RedETSA–PAHO financing model is unique to the Latin American context and not immediately replicable in Asia.
- **Philanthropic foundations:** BMGF has financed hub-like HTA support and development activities in Asia, much of it provided through CGD's iDSI. HITAP was a founding member of iDSI and has been an important implementation partner for its activities in Asia. However, BMGF engagement for HTA in Asia has tapered off; their focus for HTA is shifting to Africa. Limited HTA activities remain in India and Indonesia by virtue of being country priorities for their primary health care strategy. Some key informants anticipate limited prospects for substantial support from BMGF for Asia-focused HTA projects after the current project ends in 2023. Other key informants described prospects for HTA support as uncertain—a matter of waiting as BMGF repositions HTA within its

[30] INAHTA Strategic Plan 2021-2024; https://www.inahta.org/download/2021-2024-strategic-plan/?wpdmdl=9886

[31] Several factors contribute to this conclusion. First, during in-depth interviews, key informants indicated that PAHO's organizational model is unique among WHO's regional offices. Second, the priority of the WHO SEARO office was said to be meeting demands as they are expressed by member countries rather than through establishing regional programs. Third, staffing limitations in the WHO SEARO regional offices would limit capacity to provide the professional staff power needed to operate an HTA hub secretariate function. Finally, unlike Latin America, the countries in HTAsiaLink's coverage area are served by more than one WHO regional office.

program structure and moves toward localizing funding distribution responsibility to its country program offices.

Some key informants noted that the philanthropic organizational landscape in Asia is quite robust and growing. They suggested that a scan of such organizations be conducted to better understand their interests and funding mechanisms and that a plan be produced to approach these organizations for funding.

Table 9. Potential funding sources for an Asia HTA hub: Prospects and challenges

Potential funding source	Opportunities and prospects	Challenges
Bilateral donor agencies	■ Foreign, Commonwealth & Development Office (FCDO) is the largest bilateral donor funder in the HTA space. ■ Australia's Department of Foreign Affairs and Trade (DFAT) is highly engaged in Asia. ■ Prospects for NZAP support should be explored. ■ The Norwegian Agency for Development Cooperation and the French Development Agency provide limited funds for HTA. ■ The Swedish International Development Cooperation Agency has provided some funding for iDSI through CGD. ■ USAID provides support to HTA development, including in Asia. ■ A tailored investment case could increase funding prospects. ■ Donors may be more open to considering HTA funding in the post COVID-19 context.	■ FCDO has a limited presence in Asia. ■ DFAT emphasizes economic development and trade. ■ Asia is declining as a focus region for big global health funders. ■ NZAP is more focused on Western Pacific island nations.
Multilateral donor agencies	■ ADB trust/grant funds managed by ADB Sustainable Development and Climate Change Unit: ○ Unsolicited proposals are considered by the Japan Fund for Prosperous and Resilient Asia and the Pacific, a trust fund ADB manages. ○ Smaller ADB grant funds (e.g., from Korea and Spain) may be options. ■ PAHO (WHO) model is strong and unique. ■ World Bank support may be possible from country offices to support host country actors to participate in hub initiatives and activities.	■ Gaining access to ADB grant funds is time and process intensive. ■ WHO SEARO is not likely to replicate the PAHO model; WPRO prospects are unknown. ■ World Bank support to a hub is most likely to be provided through country technical support.
Global philanthropic foundations	■ BMGF ○ Global grants program supports HTA technical and systems development. ○ Funding to the Global Fund and GAVI includes some HTA focus. ○ BMGF is said to be exploring a new relationship with NUS; there may be opportunities to leverage that partnership. ○ BMGF may consider an unsolicited proposal for Asia hub financing. ■ A tailored investment case could increase funding prospects. ■ Other foundations may be more open in the post-COVID-19 context.	■ BMGF grant to CGD/iDSI will conclude in 2023; follow-on is uncertain. ■ BMGF funding mechanisms are shifting to a country-led "localization" strategy. ■ BMGF support for HTA will need to align with primary health care and health financing program goals.
Regional philanthropies	■ The Asia-based philanthropic organization landscape is rich, spread broadly across the region, and funded by high-net-worth individuals. Some support health and other social sector causes. Singapore and India are hubs for Asian philanthropies. Starting points: ○ Asian Center for Health Security ○ Asian Philanthropy Network	■ Additional work is needed to map the Asia philanthropic organization landscape to identify targets for funding outreach and implement a resource mobilization strategy.

Potential funding source	Opportunities and prospects	Challenges
	○ Asia Philanthropy Circle (https://asiaphilanthropycircle.org/) ■ Unsolicited proposals for small grants may be a smart way to initiate a financing strategy, establish credibility, and impact the HTA landscape, health systems, and health outcomes, possibly laying the groundwork for increased support.	■ A value proposition to communicate to prospective funders needs thought.
Corporate social responsibility (CSR)	■ CSR might provide short-term, start-up financing for new hub initiatives. ■ Target businesses with vested interests in a well-functioning health system, such as large firms that provide employee health care or insurance financing. ■ There may be prospects to tap in the pharmaceutical sector.	■ CSR funders expect results that relate to their reputation; finding alignment may be a challenge. ■ Pharmaceutical sector agendas pose some risks to tapping it as a funding source.
Public funding	■ National governments could be asked to contribute to the hub's operating costs and/or co-finance hub activities in which they participate (e.g., the EUnetHTA co-financing model). ■ Identify and work with strong in-country champions (within MOHs or elsewhere) to advocate for national budget support for participation in hub activities. ■ ASEAN is funded by country member governments. Its health clusters support efforts to address emerging health threats and needs of vulnerable populations. Key informants described an ASEAN-led HTA harmonization initiative, which may provide opportunities to leverage ASEAN support. ■ NUS may be able to contribute to financing for some hub operations and/or activities.	■ Governments work in a constrained resources environment; contributing to a regional entity may be difficult. ■ Countries with weak awareness of and commitment to HTA are least likely to contribute. ■ Country contributions to a regional entity may face legal impediments.
Hub-based member fees	■ Annual organizational and/or individual membership dues. ■ Raising revenue tied to the annual conference: ○ Conference attendance fees, with discounts for people from low- and middle-income countries. ○ Conference sponsorship fees (e.g., manufacturers, nongovernmental organizations, etc.) ■ Service fees for non-members to access hub services and resources ■ Graduated, phased-in co-financing requirements for hub-sponsored projects ■ Quid pro quo arrangements where hub project participants provide in-kind services in lieu of paying participation fees ■ In-kind contributions, such as secondment of government, parastatal, and university staff to the hub organization (salaries would be already financed), and financing for travel, per diems.	■ Countries least able to pay member fees are the most in need of the hub's support. ■ Short-term prospects for substantial member-derived revenues are low. ■ Ability of members to financially contribute to the hub needs to be divorced from the degree of participation in hub governance and agenda setting.

- **CSR:** Several key informants suggested that a similar scan of CSR funding in Asia be completed, both by regionally based and global businesses. They noted that CSR funding would likely be short term and specific in nature, and funders would be more interested in short term, visible results that may be difficult for an HTA hub to deliver. Additionally, key informants cautioned that potential conflicts of interest should be carefully considered before engaging with CSR funders. Still, it could provide some important, early-stage funding.
- **Public funding:** Several key informants believed that public funding is imperative to financing an HTA hub. For the EUnetHTA model, nearly all financing derives from a combination of central (EU Commission) and member country government funding. As noted earlier, there are at least two reasons this is not likely to be replicable in Asia. First, HTAsiaLink's secretariat function is served by a member government's HTA agency; few, if any, other countries in the region would be able to co-finance such an arrangement. Second, the countries in the region most in need of support are those least likely to have the resources to contribute to a hub's finances. Several mentioned ASEAN as worthy of examination as a host for the hub agency through which it could fund some of the hub's programs and operations. ASEAN currently engages with several countries, seeking to harmonize HTA standards across the region, leading some key informants to believe that ASEAN might be approachable. As noted earlier in this report, ASEAN might be a better source of some financing and technical support than as a hub host agency. Unlike ASEAN, HTAsiaLink's members are not solely from Southeast Asia and its health mandate is at a set of higher-level purposes.
- **Hub-based member fees:** As INAHTA noted in its latest two strategic plans, reliance on member fees as the major source of organizational revenue limits the range of activities that can be supported. There were conflicting opinions among key informants about the extent to which an Asia HTA hub should seek to derive a financing base from members or whether it should seek them at all. Fees could include annual membership dues and fees to participate in hub-sponsored activities, access hub resources, and attend the annual HTAsiaLink conference. The major concern is that a fee structure might discourage countries most in need of a hub's support from accessing its programs and services, which may exacerbate disparities in HTA system maturity across the region. It was suggested that if member fees are to be considered, a sliding fee structure could be put in place to protect access for the neediest countries in the region.

Most likely, a sustainable financing framework for an Asia HTA hub would include funding from several of these sources. Additional information will need to be obtained to produce and pursue a financing strategy. Production of an investment case analysis and messages would be helpful in approaching potential funders.[32] Key informants noted that now may be a good time to approach funders. In the COVID-19 pandemic's aftermath, recognition of the need for health system strengthening in general and for more evidence-based priority setting is high. The case for investment would need to be tailored to the value each funder seeks or its output/outcome interests. Funders generally want to see tangible products and impacts as outcomes for its investments. HTA impacts are not as easy to show in the short-term compared with investments in commodities or service delivery, for instance. Maintaining funders' interest will require continuously building a compelling case through HTA impact evaluation.

[32] The EVORA (Evaluating the Value of a Real-World HTA Agency) simulation spreadsheet tool may be useful if investment case documents for HTA in Asia regional or country contexts were to be prepared. The tool was developed by the University of Strathclyde/Glasgow with support from HITAP. https://pureportal.strath.ac.uk/en/datasets/evora-evaluating-the-value-of-a-real-world-hta-agency-simulation-

E. STRATEGIES FOR ENGAGING ASIA HTA HUB MEMBERS AND PARTICIPANTS

HTAsiaLink; HTAi Asia Policy Forum (APF; the Asia instance of similar region-based forums convened by HTAi); and the ISPOR Health Technology Assessment Roundtable–Asia Pacific are three HTA network-oriented forums in Asia. HTAsiaLink membership is mostly comprised of research organizations in Asia or government agencies responsible for HTA management and the deliberative aspects of using HTA. Commercial industry entities are not eligible for membership; this is to preserve the network's platforms as a safe space for discussion of country and regional-level, policy-sensitive matters. The APF and the ISPOR platforms convene representatives from many of HTAsiaLink's members, plus stakeholders from pharmaceutical and health technology industries. Periodic meetings are organized around specific HTA topics of regional relevance.[33] Given that HTAsiaLink–HITAP will continue to serve as the locus in Asia for HTA hub-like services and initiatives, this section provides key informants' recommendations on strategies for engaging with the HTA community as members and as participants.

Engaging members: The HTAsiaLink's membership is well-established and includes many of the region's direct HTA stakeholders. Opinions among key informants were mixed regarding the pace at which membership should be expanded. On one side, some advised that the current membership should remain stable until a process for considering an expanded purpose is completed and strategies are defined, if such a process is to be engaged. The principal concern is to ensure that membership expansion does not get ahead of and divert attention from strategic planning and strong, early program implementation. The alternate perspective is that the current membership is mostly limited to the converted (those who are committed to furthering the cause of HTA) and could better encompass unconvinced stakeholders (e.g., N/SHI reimbursement agencies, planning and finance ministries) who are key to moving HTA and use of its results forward in the region.[34] It was noted that APF does include pharmaceutical industry representatives in its dialogue sessions; these too are counted as convinced stakeholders.

Engaging members as participants: Key informants suggested four strategies to define participants for hub programs. In all such strategies, a key principle is to approach engagement as a two-way learning opportunity. Although hub programs are meant to transfer knowledge and skills to participants, those transferring the knowledge and skills also learn from participants. The first strategy would focus on activities of general benefit to HTA stakeholders across the region. A second strategy would focus on countries most in need of HTA advancement support or those that meet specific criteria for engagement. A third strategy would be driven by developing programs with specific, regional purposes and engaging countries that express interest in participating. (This is similar to how EUnetHTA joint action programs operate.) A fourth strategy would respond to demand as it is channeled upward by individual members to the hub.

[33] For 2022, the forum topic was HTA capacity building in Asia. https://htai.org/asia-policy-forum-papers/. For further information about the purpose of APF, see https://past.htai.org/policy-forum/asia-policy-forum-2/.

[34] One key informant named the annual Prince Mahidol Award Conference as a platform where a broader set of health sector policymakers can be reached. Its 2016 conference included a focus on health sector priority setting for UHC, and it is said the organizers continue to be interested in this topic (Reich 2016.)

- **Broad participants' strategy** would identify activities that produce widely useful public goods (such as regional reference case development; strengthening GEAR, the existing HTA results catalogue; e-learning courses and modules; etc.).
- **Targeted participants' strategy** includes sub-strategies suggested by key informants:
    - Target countries furthest behind in HTA maturity to lift their technical application, systems, and processes to some minimum regional standard, reducing disparities across the region.
    - Target a limited number of countries with demonstrated, high-level commitment to health sector reform, such as UHC or N/SHI (e.g., Indonesia, Philippines, and Vietnam) and/or high N/SHI program cost overruns. These strategies' goals would be to apply HTA (doing and using elements) and demonstrate the impact of hub support.
    - Select and support two or three countries that already exhibit a high degree of political commitment to HTA and that have the rudiments of HTA structures in place (i.e., a national HTA policy and a clearly designated government HTA agency). Once hub success is demonstrated (e.g., expanded N/SHI coverage, improved cost containment, improved health outcomes, reduced out-of-pocket spending), support can be expanded to additional countries.
- **Targeted program strategy** is similar to how many international programs work, with a centrally defined program purpose and structure and participants sought based on the program. Examples include EUnetHTA's three joint action programs and iDSI's adaptive HTA program.
- **Bottom-up strategy** would be driven by demand as it is expressed by individual members. It would require the most in-the-moment planning and a technical and financial resources package tailored to match each need as it arises.

These strategies are, of course, not mutually exclusive. A balanced strategy could be adopted with sufficient technical and financial resources. Key informants provided additional observations and points of advice on how to engage hub members and other stakeholders in the region.

- **Respect that "decisions are local":** Regardless of the hub's purpose and activities it pursues, countries value their autonomy with respect to how and when they conduct and use HTA. EUnetHTA illustrates the importance of this point—it proved difficult for EUnetHTA to set regional HTA standards and to get country buy-in, even with the weight of the regional EU Commission behind it. Diversity across Asia is greater than across Europe and it lacks an analogous regional governmental body to back the hub. Key informants advised that recognition of country differences will be even more important in Asia.[35]
- **Recognize variability in HTA capacity and practice:** Globally, including in Asia, HTA is variably defined and used among countries and organizations. Some variability is driven by differences in country wealth and the quantity and quality of information available to feed HTA. A hub will need to recognize these differences, expect different decision-making outcomes, and support them accordingly.
- **Adopt a country-nuanced approach to influencing how HTA evidence is used in decision-making:** Countries have important differences in their decision-making processes. In

[35] EUnetHTA's member engagement evolution was described as conflict-oriented in its early stage where many members did not buy-in to the organization's goals and objective, which eventually gave way to a cooperative phase.

many cases, evidence still takes a back seat to networks and influence. This is particularly so where weak data and information systems provide incomplete and low-quality inputs into evidence generation, including for HTA. Influencing how evidence is used requires a highly nuanced understanding of local decision-making processes and therefore requires a long commitment. A hub organization should expect slow progress in countries that place a high value on inputs into decision-making other than evidence.

- **Consider a hub program agenda that gives countries choices:** A more diverse program agenda would give the hub a larger reach for influencing different parts of the HTA system. However, it could also risk spreading the organization's technical and financial resources thinly. Serving the interests of a more diverse membership field requires a broader technical skills base and a more complex member communication strategy. The hub should consider harmonizing its resource growth with expansion of membership and technical focus.

F. KEY INFORMANT ADVICE ON HUB STRUCTURE

According to key informants, to successfully operate, a hub organization should have three functional components.

Administrative: Serves the function of organizing members, strategic and implementation planning, and evaluation. HTAsiaLink's secretariat has served that function, with its board of directors sharing planning functions. To date, the secretariat has been external to HTAsiaLink. For most of HTAsiaLink's existence, NECA (South Korea's government HTA agency) has served as its secretariat. That responsibility was recently transferred to HITAP (Thailand's government supported HTA agency). The current arrangement is likely to remain stable for the foreseeable future.[36]

Program management: Keeps hub programs and activities on course and oversees implementation quality. Given the current range of programs and function in the HTAsiaLink–HITAP arrangement, its program management structure is sufficient. The major hub activity is planning and execution of the annual regional HTA conference. The host country, which rotates each year, shoulders most of the responsibility for planning and managing that activity.

Communication/IT: IT serves a dual purpose and requires a secure and easily accessible IT platform. It facilitates member communication and it serves as an internal portal for integration of the administrative and project management components.

[36] Two HTA hub arrangements elsewhere provide points of comparison to the HTAsiaLink–HITAP arrangement. In Latin America, RedETSA illustrates an external secretariat model. The secretariat is housed within PAHO, which provides labor and funding for the secretariat functions. RedETSA contributes to planning through annual meetings and topic-specific working groups. Working group members are RedETSA members and are supported administratively by PAHO-based secretariat staff. EUnetHTA, the European HTA hub organization, illustrates the internal secretariat model; administrative and planning staff are internal to the hub organization itself.

According to key informants, a hub organization needs several capabilities to keep these three integrated components running smoothly (box 5).

Box 5. Necessary hub characteristics and capacities

- Strong technical and financial "muscle," inclusive of a human resource base with an appropriate range of technical skills that matches its program structure
- Ability to engender a sense of connectivity, equality, co-ownership, and "mutuality of benefit" among members and to obtain and maintain buy-in to the hub's purpose and programs
- An inclusive governance structure that amplifies members' voices and captures wide-ranging perspective in hub planning, implementation, and evaluation
- A leadership committed to HTA as a necessary discipline for health sector decision-making and priority setting and to hub members, and leadership that is committed to collaborative approaches to leading
- Ability to establish and maintain a financing base for its operations, programs, and activities
- Ability to recognize and respect regional diversity (in the culture of decision-making, HTA systems maturity, preferences for how and for what to use HTA, and general health system differences) and use it to contextualize country support
- Ability to make commitments to countries for long-term HTA development that aligns with country-driven HTA agendas

As described earlier, the HTAsiaLink–HITAP hub governance framework has HITAP staff providing secretariat-level leadership and the HTAsiaLink Board of Directors coordinating with HITAP to provide strategic leadership. This arrangement is generally regarded as acceptable across the region, though key informants noted that with a more complex program structure, creating new ways for stakeholders to contribute during planning and evaluation processes may be useful. To achieve this goal, RedETSA–PAHO incorporated a working group structure into hub planning. That approach has been successful, and the organization is seeking to expand the number of working groups from two to four.

Key informants expect the Asia HTA hub to face three primary challenges. First, the balance between influence networks and evidence in decision-making tends to favor the former. This will have bearing on how the hub seeks and obtains insights on need and demand for hub services, and in planning and executing programs and activities. The greater the degree of shared ownership and the more open the channels of consultation, the greater the likelihood that the hub will achieve success in contributing to regional HTA development. Second, some regional stakeholders harbor what key informants described as "mistrust of foreign interests." Given the likelihood that partial hub funding will come from resources external to the region, nodes of mistrust will need to be managed. Third, political crosscurrents within Asia are also likely to affect how the hub structures its program and activity implementation. In both instances, decision-makers both within the hub and within country member delegations will need to be aware of and balance agenda differences.

G. POTENTIAL TECHNICAL SUPPORT SOURCES FOR THE ASIA HTA HUB

Donors and Foundations

The key informant interviews (KIIs) augmented this assessment's understanding of the region's technical support. Donors and foundations, like BMGF, World Bank, and regional WHO offices, have provided technical support to HTA as a tool for high-level decision-making, prioritizing and UHC planning,

creating greater access to primary health care services at the periphery, and obtaining greater mileage with limited financial resources.

BMGF: Currently, BMFG supports HTA in India and Indonesia as its priority countries in the Asia region. Generally, BMGF's HTA funding to Asia has been centered on adaptive HTA training, and there is a strong interest in supporting UHC decision-making (i.e., benefits package design) that sets health insurance schemes up for long-term success. BMFG's HTA work has been largely implemented through the grant for iDSI, which is currently led by the CGD and supported by funding from BMFG, FCDO, and The Rockefeller Foundation. iDSI's technical assistance includes building institutions and technical skills, networking, and generating demand for HTA among policymakers. In Asia, the HITAP International Unit has been a key implementation partner for iDSI. A quick search on their website shows many resources, including an HTA Toolkit and their notable book, *What's In, What's Out: Designing Benefits for Universal Health Coverage*. Informants shared that BMFG's focus has shifted from HTA in the Asia region to HTA in Africa. As a result, CGD has been supporting the Africa Centres for Disease Control and Prevention to set up AfriHTA as the region's hub, with focused support in Rwanda, Kenya, Ethiopia, and Ghana. The iDSI grant is expected to close at the end of 2023; despite the network expansion, it is not clear what will happen after 2023.

World Bank: The World Bank's focus has mainly been on evidence-based priority setting, using HTA as a tool. Some of the resources developed by their decisions and delivery science team are the Health Interventions Prioritization Tool and the Optima Nutrition Learning Tool, which have some relevance to HTA. However, the World Bank's support is largely driven by their country offices and individual country programs. For example, they have partnered with iDSI and other funding agencies to support Indonesia's MOH to establish HTA guidelines and improve technical capacity in support of their national health insurance program, Jaminan Kesehatan Nasional (JKN). In doing so, they hope to increase HTA outputs from two to five assessments a year, develop HTA governance, build capacity in HTA, and increase demand for HTA among the JKN team.

WHO SEARO: The WHO SEARO office has also been providing technical assistance to its member countries but does not have a full-scale HTA technical program. HTA is considered one of the tools that the regional WHO office has to offer to support governments. Most HTA support has been to Indonesia, but WHO also supported HITAP when it took over the role of the HTAsiaLink Secretariat. They have also supported country HTA agencies in assessing innovative technologies. Informants made it clear that WHO SEARO responds to their member countries' government needs.[37]

Although donors and foundations have historically provided financial and technical support for HTA in the region, conversations with global key informants expressed a general opinion that donor-created hubs (referring to hubs in general, not limited to HTA hubs specifically) tend not to be very successful. However, they agreed that donors hold a large body of technical and organizational development tools

[37] Among the focus countries for this report, WHO SEARO serves the South Asian countries, Indonesia, Myanmar, Singapore, Thailand, and Timor-Leste. WHO WPRO serves Cambodia, China, Japan, Korea, Lao PDR, Malaysia, Papua New Guinea, Philippines, and Vietnam. This study team was not able to schedule an interview session with WHO WPRO. Additional support to regional HTA development is likely provided by WHO WPRO and, going forward, it would be useful to capture this information. For example, this study's key informants reported that WHO WPRO has provided support to Malaysia's MaHTAS for capacity building in HTA, horizon scanning, and clinical practice guidelines.

and resources that an Asia HTA hub can tap. This is a base on which a hub should build rather than starting from scratch or duplicating efforts.

International Organizations

Besides donors and foundations, other international organizations provide technical support, such as INAHTA, ISPOR, and HTAi. These organizations could be partners in supporting an Asian hub.

INAHTA: The International Network of Agencies for Health Technology Assessment is a network of HTA agencies that share information about producing and disseminating HTA reports for evidence-based decision-making. With the secretariat at the Institute of Health Economics in Canada, INAHTA is perceived as a resource hub and not a major player in HTA policy development or technical assistance. They are known for their large international HTA database to which many countries contribute, but informants have shared that the catalogue could be improved by curating the HTA reports to make them easier to search. INAHTA also has task groups where members can attend the monthly meetings and share their experiences. They also conduct a topic prioritization exercise with their members to identify gaps or make improvements in member support.

HTAi: Health Technology Assessment International was founded in Canada and is the global HTA society that hosts events, webinars, has 10 member-led interest groups (including one on LMICs), and provides networking opportunities. Several of the key informants for this MTaPS assessment have attended or mentioned the HTAi APF meetings, which brings together academics, manufacturers, HTA agencies, patients, and other stakeholders for strategic, innovative, and open discussions about HTA in Asia. This annual forum is for members and by invitation only, but informants said that it generates good dialogue. However, limited bandwidth confines this group to influential thinking. HTAi has helped countries with practical application of HTA through HTAi-produced guides and tools. Most noteworthy is the good practices guide for designing and implementing deliberative processes for HTA (Oortwijn 2022).

ISPOR: The Professional Society for Health Economics and Outcomes Research also hosts regional events, such as the Virtual Asia Pacific Summit, the ISPOR HTA Roundtable–Asia Pacific, and the ISPOR HTA Council. ISPOR gives their members opportunities to get involved in special interest groups, task forces, and other working groups. It is also a source for good HTA practices.

Universities

Universities inside and outside the Asia region provide HTA support. Informants mentioned that universities in Australia and New Zealand have centered HTA support in the Pacific Islands, while providing minimal support in the South Asia or Southeast Asia regions. Likewise, the UK and EU have supported HTA mostly in the Central Asia region. Also, academic institutions in Asia have provided some HTA training or technical assistance, including NUS and Thailand's Mahidol and Chulalongkorn Universities.

In summary, several organizations providing technical assistance in the Asia region are potential partners for an HTA hub. These players have developed resources that Asian countries are using, and a regional hub could tap into these resources. For example, even though the e-survey results showed interest in an HTA results catalogue, informants revealed that several results catalogues exist already (e.g., GEAR,

INAHTA, and CDE), but with limitations. This presents an opportunity to improve or build on the existing catalogues as well as other existing resources, including reference cases and guidelines for technical and institutional development needs.

KEY TAKE-AWAY MESSAGES, RECOMMENDATIONS, AND NEXT STEPS

MESSAGES AND RECOMMENDATIONS

Key message 1: The most significant finding from this assessment is that the HTAsiaLink–HITAP nexus is widely considered to be the current, de facto HTA hub organization in Asia, and it is well-respected for its combined efforts to support HTA technical and systems development. Though some of their efforts have been focused on Southeast Asia, HITAP has supported some initiatives in South Asia as well, and it is positioning itself to further expand its geographical reach—it is considered a "powerhouse" of technical HTA "doing". Although HITAP has also provided support for HTA systems development and institutionalization, key informants described this as a growth area for HITAP. HTAsiaLink is widely respected for the well-organized, annual regional HTA conferences that serve as fertile ground for learning and networking. The recent migration of HTAsiaLink's secretariat to HITAP's International Unit provides a unique opportunity to solidify and expand on the hub functions that these two organizations have long been pursuing together. It is widely believed that HTAsiaLink–HITAP could and should more formally define an organizational vision and purpose.

Recommendation 1: Demand for increased, more varied, and systematically designed support for HTA advancement is strong in Asia. Supporting the HTAsiaLink–HITAP arrangement could be a successful pathway to ramp up HTA support to the region.

Key message 2: The most commonly expressed dimension of demand is the development and implementation of an integrated, region-wide HTA short- and long-term human resources capacity-building strategic plan. The plan should encompass HTA technical skills building (doing); HTA deliberative skills (using); and HTA systems management.

Recommendation 2: Should HTAsiaLink–HITAP embark on an HTA human resources capacity-development strategic planning process, key informants would like to see support provided to formulate a strategic plan. NUS's School of Public Health could be engaged to play an integral role in that process.

Key message 3: Second only to human resources capacity development, HTA in Asia would benefit most from an improved political and policy climate. Key informants cited low level of awareness about HTA decision-making cultures that favor networks and influence over evidence and inadequate institutional HTA structures as areas most in need of attention. In each country, these factors operate in different combinations, and thus nuanced, context-specific pathways will need to be defined. Support for demand-side improvement in the HTA environment needs to catch up to support for improving the supply side (producing HTA output) for HTA "doing" capacity to achieve its impact potential. Presently, policy and political leaders—those with the greatest ability to influence the HTA environment—are at best weakly engaged with HTA stakeholders in countries where HTA systems are least developed.

Small, low-cost initiatives can have significant effects on promoting improvement in the political and institutional environment and demand for HTA.

Recommendation 3: A good place to start to support political capital development would be to create platforms, forums, and opportunities to bring policy and political leaders into more contact with HTA stakeholders. Key informants suggested several easy-to-design and implement initiatives. Opening and financing attendance at regional HTA conferences to non-members and non-HTA professionals would expose policy and political leaders to HTA output and its potential for positive policy, social, fiscal, and economic impacts. Creating special forums at the annual conference and other platforms for strategically chosen non-HTA leaders could also effectively address concerns they may have about HTA. Additional suggestions include establishing a dedicated scholarship fund for non-HTA experts who are career government functionaries to enroll in HTA certificate or degree programs. These well-placed, initial investments would shore up HTA's political economy environment.

Key message 4: Informants would like to see more ways to amplify more voices in hub governance and strategic decision-making. HTAsiaLink is currently led by seven elected board of directors' members from among the HTAsiaLink country members and an elected president. A representative from HTAsiaLink's secretariat organization (currently HITAP) also serves as a Board member. This arrangement is considered to have successfully channeled a bottom-up perspective from HTA practitioners in the region into planning and organizing its activities. Key informants suggested building on this governance structure to capture perspectives by more non-HTA actors in the region who hold the power to mandate incorporation of HTA into decision-making processes and to provide political support for HTA institutionalization. Additionally, adopting working groups into its governance and planning structures (as does RedETSA–PAHO) would expand opportunities for direct participation in hub governance and planning.

Recommendation 4: Support establishment of a working group to consider creating a formal hub vision and purpose, and from there, to formulate a regional human resource capacity-development strategic program plan. Include institutional representatives in the working group from outside HTAsiaLink's Board of Directors, such as representatives from regional academic institutions with established HTA degree programs.[38]

Key message 5: There is strong demand in Asia for a range of public goods HTA products. These include strengthening GEAR and adding to the growing library of references case guides to cover the full range of an HTA system.

Recommendation 5: Support HTAsiaLink–HITAP to formally review lessons learned from other HTA results databases (e.g., RedETSA's BRISA, INAHTA's International HTA Database, and Tufts University's HTA Database, and the overlapping National Health Service Economic Evaluation Database) and to create and implement a plan to strengthen GEAR accordingly. Mapping gaps in the regional library of HTA reference cases should be a focus as should developing new references cases to fill identified gaps.

[38] See Section B for information about countries with academic HTA degree programs. In addition to Singapore, they include universities in Thailand, Malaysia, Philippines, and India.

Key message 6: Key informants uniformly agreed that the hub's ability to mobilize and maintain a financing base that is well synchronized with its program plan will be a critical determinant of its success. A wide range of potential funding sources exist, some of which are more appropriate for early, short-term financing; others may be prospects for longer-term financing. A challenge for the hub will be to successfully tap a range of funding while maintaining independence with respect to defining programs and activities that align with members' demands.

Recommendation 6: HTAsiaLink–HITAP should be supported to systematically scan funding opportunities to better understand funders' interests and funding mechanisms and to produce a resource mobilization plan. Regional sources, including from the robust philanthropic organizational landscape in Asia, ADB grant funding, and CSR funding, should be explored for potential, longer-term prospects.

NEXT STEPS

The primary purpose of this assessment was to provide USAID with contextualized recommendations about options for helping strengthen the maturity of an HTA hub arrangement for Asia. Six such recommendations were articulated in the preceding section. These comprise the starting point from which MTaPS, in consultation with USAID, will define a work plan to support the HTA landscape in Asia. What was learned, however, goes considerably beyond those recommendations and may be of value to the HTA community in Asia. It may also be of more general interest to those who support other regional HTA hubs. MTaPS envisions the following actions to make this learning more universally available:

- **Validate report content with key informants:** MTaPS will share a tailored version of this report to circulate among key informants to validate contents, particularly the advice and recommendations provided. In many instances, there was just one key informant per country or per organization. Therefore, that tailored version will protect key informant confidentiality as promised. MTaPS will update this report according to responses received from key informants. Given the global range of key informants interviewed, this validation process will also serve as a means of dissemination beyond the HTAsiaLink–HITAP principals and other HTA stakeholders in Asia.
- **Dialogue with HTAsiaLink's directors together with its secretariat staff at HITAP.** The in-depth interview results suggested that HTAsiaLink–HITAP may wish to pursue the activities proposed in the six recommendations presented in the preceding section. Some of the HTAsiaLink–HITAP principals were key informants to this assessment, so they will be included in the validation exercise described above. MTaPS will prepare a tool based on this report to be the centerpiece for a dialogue session with HTAsiaLink directors and secretariat staff. The discussions will cover the options for USAID MTaPS support to be launched in 2023. The goal will be to identify which activity options they would like to undertake themselves, and for which if any, they would welcome USAID MTaPS support. They will also be asked to help define a plan of action for that support.
- **Prepare a work plan for year 5 support to HTA in Asia.** Based on the outcome of the HTAsiaLink–HITAP dialogue session, MTaPS will prepare and submit to USAID a work plan, and upon USAID's approval, will begin MTaPS support.
- **Explore additional important topic areas identified during this assessment.** As noted throughout this report, many topics emerged for which there was insufficient time for warranted

exploration. As part of the work plan and in collaboration with the Asia HTA project counterparts, MTaPS will explore those topic areas, including:

- ASEAN's interest and potential to support a hub and its financing needs
- WPRO's perspective and activities supporting HTA in its region (to augment SEARO's perspective)
- A scan of the philanthropic and CSR landscapes and funding potential in Asia

ANNEX A. ELECTRONIC SURVEY INSTRUMENT

Survey of HTA needs in Asia

Section 1: Respondent information

HTA has a rich history in Asia and continues to evolve and grow as a practice to guide decision-making about how to use finite health sector resources. To contribute to this evolution, the USAID-funded Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program is conducting a landscape analysis to (a) identify critical HTA doers, users, and supporters in Asia; (b) explore stakeholders' visions and demand for an HTA hub in Asia; and (c) examine possible priorities and combinations of support for a regional hub.

We respectfully request 10 to 15 minutes of your time to complete this short survey to help us in the effort. We would be grateful if you would complete this survey and return it to us by Wednesday, October 12. Summary results will be shared with all respondents. We greatly appreciate your help. Thank you.

Your participation in this survey is voluntary and you may stop at any time. You may skip any questions you prefer not to answer for any reason. Your responses will be completely confidential. We will use only summary, aggregated analysis of completed surveys returned to us. None of this summary, aggregated data will include identifying information.

1. Which of the following statements best describes the primary way your work relates to HTA?
☐ I am a policy maker who uses HTA to make decisions.
☐ I am an administrator or manager who oversees HTA processes (e.g., research applications, monitoring HTA research implementation).
☐ I am a technical expert who conducts or contributes to HTA research studies and analyses.
☐ I am an advocate that reviews HTA analyses and results and/or seeks to ensure HTA is properly used in decision-making.
☐ I am a healthcare provider.
☐ Other (Please use the space below to specify how your work relates to HTA.)

_____

2. Which of the following types of organizations best describes the organization for whom you work in your professional capacity related to HTA?
☐ MOH/DOH
☐ Academic institution (e.g., university or training institute)
☐ Research institution independent of any academic institution
☐ Healthcare provider organization
☐ Technical assistance organization
☐ Advocacy organization
☐ Health insurance reimbursement agency
☐ Other (Please use the space below to specify the type of institution where you work.)

_____

3. In which country does most of your HTA work take place?

_____

Section 2: General perceived need for an HTA hub in Asia (your organization part 1)

For the purpose of answering questions in this section, an "HTA hub" is defined as an organization whose primary purpose is to promote and support improvements in the environment for doing HTAs and using HTA results for health sector decision-making. Support may include institutional, policy, and/or technical/scientific development.

4. In your opinion, does **your organization** need support to improve its role in the HTA environment?
☐ Yes, a high level of need
☐ Yes, a medium level of need
☐ Only a low level or no need
☐ Does not apply because I am not affiliated with a specific organization

Section 2: General perceived need for an HTA hub in Asia (your organization part 2)

For the purpose of answering questions in this section, an "HTA hub" is defined as an organization whose primary purpose is to promote and support improvements in the environment for doing HTAs and using HTA results for health sector decision-making. Support may include institutional, policy, and/or technical/scientific development.

5. Please choose the **top 3** highest priority areas for HTA support needed by **your organization**. Use the space provided to name items not named in this list.

☐ General knowledge building and awareness about HTA (e.g., how it is done and how it is used)
☐ Institutional development
☐ Development of HTA policies, guidelines and procedures, and process management guidelines and tools
☐ Technical HTA skills building (methods for "doing" HTA research and analysis)
☐ How to appraise HTA research and analysis results
☐ Translation of HTA research results for use by decision makers
☐ How to use HTA research results in decision-making
☐ Translation of HTA research results and decisions for implementation by healthcare practitioners and managers
☐ How to finance HTA research, management, and translation
☐ Regional collaboration/peer learning opportunities
☐ How to monitor and document the impact of HTA on decision-making and health systems development

_____

Section 3: General perceived need for an HTA hub in Asia (your country)

6. Does the **country where you primarily work** need support to improve the HTA environment?

☐ High level of need
☐ Medium level of need
☐ Low level or no need

7. In the **country where you primarily work**, please select the 3 areas where support is most needed to improve the HTA environment. Use the space provided to name items not named in this list.

☐ General knowledge building about HTA (e.g., how it is done and how it is used)
☐ Institutional development
☐ Development of HTA policies, guidelines and procedures, and process management guidelines and tools
☐ Technical HTA skills building (methods for "doing" HTA research and analysis)
☐ How to appraise HTA research and analysis results
☐ Translation of HTA research results for use by decision makers
☐ How to use HTA research results in decision-making
☐ Translation of HTA research results and decisions for implementation by healthcare practitioners and managers
☐ How to finance HTA research, management, and translation
☐ Regional collaboration/peer-learning opportunities
☐ How to monitor and document the impact of HTA on decision-making and health systems development

_____

8. Please select the 3 areas of strength where you think your country would best be able to contribute to supporting regional development of HTA.

☐ General knowledge building about HTA (e.g., how it is done and how it is used)
☐ Institutional development
☐ Development of HTA policies, guidelines and procedures, and process management guidelines and tools
☐ Technical HTA skills building (methods for "doing" HTA research and analysis)
☐ How to appraise HTA research and analysis results
☐ Translation of HTA research results for use by decision makers
☐ How to use HTA research results in decision-making
☐ Translation of HTA research results and decisions for implementation by healthcare practitioners and managers
☐ How to finance HTA research, management, and translation
☐ Regional collaboration/peer learning opportunities
☐ How to monitor and document the impact of HTA on decision-making and health systems development

_____

Section 4: Demand for specific hub output

There are many products and resources a regional HTA hub could provide to improve the environment for HTA. For each product named, please rate how useful you think it would be to your organization and your country.

An HTA **results catalogue** would include results from HTAs and cost-effectiveness analyses conducted in Asian countries. The following questions ask how useful it would be for an HTA hub to create an accessible **HTA results catalogue** for the Asia region.

9. Would an **HTA results catalogue** be useful to **your organization**?
☐ Yes, it would be useful to my organization
☐ No, it would not be useful to my organization
☐ Unsure if it would be useful to my organization
☐ Does not apply because I am not affiliated with a specific organization

10. Would an **HTA results catalogue** be useful to **your country**?
☐ Yes, it would be useful to my country
☐ No, it would not be useful to my country
☐ Unsure if it would be useful to my country

11. What is the likelihood that your country would be willing and able to contribute to a **regional HTA results catalogue**?
☐ Likely
☐ Neither likely nor unlikely
☐ Unlikely

12. Would you expect there to be any legal, administrative, or other impediments to sharing HTA results from your country for inclusion in a **regional HTA results catalogue**?
☐ Likely
☐ Neither likely nor unlikely
☐ Unlikely
If likely, please elaborate: _____

13. What can be done to facilitate the ability of organizations in your country to share data with the **HTA results catalogue**? Choose all that are applicable.
☐ Pursue public sector "open data"/data transparency policy reforms.
☐ Promote a stronger, more open culture of data sharing.
☐ Streamline or decentralize information-sharing approval processes.
☐ Strengthen data confidentiality protections and practices.
☐ Improve the quality of data available.
Please record other facilitating actions that could be taken.
_____

A **health services delivery cost database** would, for example, include evidence on unit costs, costs of interventions, and program costs of delivering health services in Asia. The following questions ask how useful it would be for an HTA hub to create a **health service delivery cost database** in Asia.

14. Would a **health services delivery cost database** be useful to **your organization**?
☐ Yes, it would be useful to my organization
☐ No, it would not be useful to my organization
☐ Unsure if it would be useful to my organization
☐ Does not apply because I am not affiliated with a specific organization

15. Would a **health services delivery cost database** be useful to **your country**?
☐ Yes, it would be useful to my country
☐ No, it would not be useful to my country
☐ Unsure if it would be useful to my country

16. What is the likelihood that your country would be willing and able to contribute to a **regional health services delivery costs database**?
☐ Likely
☐ Neither likely nor unlikely
☐ Unlikely

17. Would you expect there to be any legal, administrative, or other impediments to sharing health intervention costing data from your country for inclusion in a **regional health services delivery cost database**?
☐ Likely
☐ Neither likely nor unlikely
☐ Unlikely
If likely, please elaborate: _____

18. What can be done to facilitate the ability of organizations in your country to share data with the **regional cost database**? Choose all that are applicable.
☐ Pursue public sector "open data"/data transparency policy reforms.
☐ Promote a stronger, more open culture of data sharing.
☐ Streamline or decentralize information-sharing approval processes.
☐ Strengthen data confidentiality protections and practices.
☐ Improve the quality of data available.
☐ Please record other facilitating actions that could be taken.
_____

19. What would be your 3 other highest priority activities for an HTA hub in Asia to focus on initially?
a. _____
b. _____
c. _____

Section 5: Thoughts on a regional "home" for an HTA hub in Asia

20. In your opinion, what are the most important criteria to consider in determining how to establish an HTA hub for Asia? Please select 3 highest priority criteria from the list below.
☐ Extent of experience in conducting HTA research
☐ Location
☐ Extent of experience in organizational and policy development for HTA
☐ Connected to international HTA networks and organizations
☐ Extent of experience using HTA in decision-making processes
☐ Regional reputation
☐ Experience in providing technical assistance or support to multiple countries in the Asia region
☐ Is an existing organization

21. Is there an organization that already exists in Asia that you think should be considered for becoming the HTA hub organization in Asia?
☐ I don't know of an existing organization in Asia that would be a good candidate for becoming an HTA hub in Asia.
☐ In my opinion, the following organization(s) would be a good candidate to become an HTA hub in Asia. (Please name the organization(s) in the space below.)
_____

22. In what ways do you think an organization like yours might be able to contribute to establishing an HTA hub organization in Asia. (From the list below, please check all that apply. In the space provided, please list other ways your organization might contribute to establishing an HTA hub in Asia.)
☐ Technical expertise and training
☐ Organizational development expertise
☐ Financing (e.g., paying membership fees, paying for HTA reference documents or data, paying fees for technical assistance or training, financing salaried staff positions for the hub organization)
☐ In-kind contributions (e.g., technical assistance, materials, data, and information for hub-created databases and clearinghouses, materials, such as supplies and equipment)

☐ Other (Please use the space below to name other ways in which your organization might contribute to establishing an HTA hub organization in Asia.)

_____

23. Your responses to this survey are anonymous. If we would like to learn more about your responses, what is the best way to contact you?
Name: _____
Email: _____

24. We will acknowledge your participation and insights to this survey, while maintaining anonymity and without disclosing any individual experts' commentary. Can we acknowledge your participation in this survey in the final reports?
☐ Yes
☐ No

You have reached the end of this survey; thank you kindly for your participation. If you are ready to submit your completed survey, please click the button below.

ANNEX B. IN-DEPTH INTERVIEW GUIDES

A. KII GUIDE – HTA PRACTITIONERS IN ASIA

Prefilled interview information

Name of interviewee: _____

Interviewee's organization: _____

Interviewee's position in the organization: _____

Interviewee's location: _____

Interview date: _____

Name of interviewer: _____

Names of interview notetaker: _____

Opening statements

Good morning/afternoon (*name of key informant*). Thank you for agreeing to participate in this interview. My name is _____, and I am conducting this interview on behalf of the USAID-funded Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program.

HTA has a rich history in Asia and continues to evolve and grow as a practice to guide decision-making about how to use finite health sector resources. To contribute to this evolution, the USAID-funded MTaPS Program conducted a short survey of HTA doers, users, and supporters in Asia to learn more about stakeholders' visions and demand for an HTA hub in Asia and to examine possible priorities and combinations of support for a regional hub. We hope that our conversation with HTA leaders in the region, like you, will help us obtain a deeper understanding about how an HTA hub can support further evolution of the practice and use of HTA in the Asia region.

For the purpose of our conversation today, we define an "HTA hub" as an organization whose primary purpose is to promote and support improvements in the environment for doing HTAs and using HTA results for health sector decision-making. Support may include institutional development, policy development, and/or technical/scientific development, among others.

Your participation in this survey is voluntary and you may stop at any time. You may choose not to answer any of the questions we pose. Your responses will be completely confidential; we will not associate your name with any of your comments here without your prior explicit permission. We are recording this interview solely for the purpose of transcription. Once transcription is complete, the recording will be deleted and the transcription will be deidentified. No one beyond our interview team will have access to the association between the transcription and the names of the people with us today for this conversation.

We would like to confirm your permission to participate based on this opening statement.

(*Wait for the participant to agree. If the participant agrees to participate but not to be recorded, pause to turn off the recording and then continue.*)

If interviewee agrees to proceed: Thank you, we appreciate your participation; let us proceed.

If interviewee does not agree to proceed: Thank you for your time; have a good day.

Section I: General state development HTA practice and use in the Asia region

1. Tell us about yourself and your work in HTA.

2. In your professional role, do you engage primarily in your home country, primarily in other countries, or a mix of both?

3. From your regional perspective, what are the most pressing needs to support HTA in the Asia region as a whole?

4. How are these needs being addressed now?

5. How would you rate the pace of progress in the development of HTA as a practice in Asia?

Section II: General, perceived need for an HTA hub to serve the Asia region

6. Recalling the definition of an "HTA hub" mentioned earlier, in your opinion would establishment of an HTA hub here in Asia usefully hasten the pace of HTA practice and use in the region?

7. What would improve the prospects for success of an HTA hub in the Asia region?

Section III: Specific guidance on establishing an HTA hub to serve the Asia region

8. What criteria do you think are most important to consider when thinking about selecting or creating an organization to serve as an HTA hub in Asia?

9. Is there an organizational entity that already exists in Asia that you believe would be well-suited to evolve into the role of an HTA hub for the Asia region?

10. How could a hub's operational approach accommodate the fact that HTA systems and practice vary widely across the Asia region?

Section IV: Demand for specific hub output

11. What would be the 3 initiatives you would most like to see a new HTA hub in Asia implement initially?

12. An HTA results catalogue would include results from HTAs and cost-effectiveness analyses conducted in Asian countries. Would development of an HTA results catalogue, shareable across the region, be a useful undertaking for an HTA hub in Asia?

13. A health services delivery cost database would, for example, include evidence on unit costs, costs of interventions, and program costs of delivering health services in Asia. Would development of a cost database, shareable across the region, be a useful undertaking for an HTA hub in Asia?

14. Do you have thoughts and advice on how creation and operation of an HTA hub in Asia could or should be financed?

15. This concludes our interview, and we thank you for your time, insights, and advice. At this point do you have any questions you'd like to ask us or any parting advice you would like to convey as we move forward to formulate recommendations for establishing a hub to support HTA practice and use in Asia?

B. KII GUIDE – DONOR AGENCIES

Prefilled interview information

Name of interviewee: _____

Interviewee's organization: _____

Interviewee's position in the organization: _____

Interviewee's location: _____

Interview date: _____

Name of interviewer: _____

Names of interview notetaker: _____

Opening statements

Good morning/afternoon (*name of key informant*). Thank you for agreeing to participate in this interview. My name is _____, and I am conducting this interview on behalf of the USAID-funded Medicines, Technologies and Pharmaceutical Services (USAID MTaPS) Program.

HTA is increasingly being adopted by country decision makers as a tool for producing evidence for decisions about how to best use finite health sector resources. The practice and use of HTA is rapidly evolving in Asia and the USAID MTAPS Program has been asked to investigate how creation of an HTA hub organization in Asia can contribute to that evolution. We have conducted a survey of HTA doers and users in Asia to learn about their interests, priorities, and combinations of support for a regional hub.

A new HTA hub organization in Asia would benefit from broad-based support. The purpose of our conversation with you today is to learn how (*the interviewee's organization*) supports the practice and use of HTA globally and at the country level and to learn about HTA-related tools, initiatives, and projects either recently completed, currently underway, or planned for the new future. We are also interested to hear your thoughts on the highest priority needs to support development of HTA as a practice globally and in the Asia region and to hear your advice on how to go about establishing, supporting and financing a HTA hub organization in Asia.

For the purpose of our conversation today, we define an "HTA hub" as an organization whose primary purpose is to promote and support improvements in the environment for doing HTAs and using HTA results for health sector decision-making. Support may include institutional, policy, and/or technical/scientific development.

Your participation in this survey is voluntary and you may stop at any time. You may choose not to answer any of the questions we pose. Your responses will be completely confidential; we will not associate any of your comments here with your name without your explicit permission. We are recording this interview solely for the purpose of transcription. Once transcription is complete, the recording will be deleted and the transcription will be deidentified. No one beyond our interview team will have access to the association between the transcription and the names of the people with us today for this conversation. We would like to confirm your permission to participate based on this opening statement. (*Wait for the participant to agree. If the participant agrees to participate but not to be recorded, pause to turn off the recording and then continue.*)

If interviewee agrees to proceed: Thank you, we appreciate your participation; let us proceed.

If interviewee does not agree to proceed: Thank you for your time; have a good day.

Section I: Organizational "home unit" for HTA and position on HTA as a health planning tool

1. Tell us about yourself and your work on HTA.

2. Does (interviewee's organization) have a unit dedicated to or responsible for overseeing work related to HTA?

Does (interviewee's organization) have a written position statement concerning the role of HTA in health sector policy, planning, and decision-making?

We may request a copy or a link to a copy of the document and ask you to provide a summary of that position or policy statement.

3. Has your organization produced policy or guidance documents, guidelines, tools or other documents designed to help HTA practitioners and users improve the practice and use of HTA?

We may request a copy or a link to a copy of the document and ask you to provide a summary of those documents.

Section II: Global and country level support for HTA development

4. Has your organization financed or is it now financing any global, regional or country level projects or initiatives to improve the practice and use of HTA?

5. Does your organization work with or provide support to RedETSA, the HTA hub for Latin America?

6. Does your organization work with or provide support to EUnetHTA, the HTA hub for the Europe region?

7. Does your organization work with or provide support to HTAsiaLink, an HTA network in the Asia region?

8. Does your organization work with or provide support to other international organizations that support development of HTA? Such organizations include, for example, INAHTA, HTAi, iDSI, and Euroscan International Network.

Section II: Advice on an HTA hub for Asia

9. Consideration is being given to establishing an HTA hub to be located to serve the Asia region. What advice would you give to those who are considering such an initiative?

10. What advice on financing models would you give us to meet initial, short-term needs and to put the hub on a path toward sustainability?

11. What would be some high-value "quick wins" a new HTA hub in Asia could take on as activities and initiative in its first 1 to 3 years?

12. What is the likelihood that your organization could or would contribute to establishing an HTA hub in Asia?

13. What is the likelihood that your organization could or would contribute to supporting a new HTA hub in Asia during its first several years of operation?

14. This concludes our interview and we thank you for your time, insights, and advice. At this point do you have any questions you'd like to ask us or do you have any parting advice you would like to convey as we move forward to formulate recommendations for establishing a hub to support HTA practice and use in Asia?

C. KII GUIDE – OTHER HTA HUBS

Prefilled interview information

Name of interviewee: _____

Interviewee's organization: _____

Interviewee's position in the organization: _____

Interviewee's location: _____

Interview date: _____

Name of interviewer: _____

Names of interview notetaker: _____

Opening statements

Good morning/afternoon (*name of key informant*). Thank you for agreeing to participate in this interview. My name is _____, and I am conducting this interview on behalf of the USAID-funded Medicines, Technologies and Pharmaceutical Services (USAID MTaPS) Program.

HTA is increasingly being adopted by country decision makers as a tool for producing evidence for decisions about how to best use finite health sector resources. The practice and use of HTA is rapidly evolving in Asia and the USAID MTaPS Program has been charged to investigate how creation of an HTA hub organization in Asia can contribute to that evolution.

You were invited to participate in this interview because you have been identified as a key informant for the _____ HTA hub organization. The goal of our conversation today is to learn from you about how your organization was established and to get your advice on establishing an HTA hub in Asia. What we learn from you and from others we are interviewing will help us as we craft recommendations for establishing a hub for HTA in Asia.

We respectfully request 45–60 minutes of your time to help us in this effort to advance HTA in Asia. Your participation in this interview is voluntary and you may stop at any time. You may skip any questions you prefer not to answer for any reason. Your responses will be completely confidential; other than your name and position in your organization, no personal information is being collected about you. A summary of what we learn across all interviews may be submitted to USAID, and if it is, what we share will have no identifying information. We are recording this interview solely for the purpose of transcription. Once transcription is complete, the recording will be deleted and the transcription will be deidentified. No one beyond our interview team will have access to the association between the transcription and the names of the people with us today for this conversation. We would like to confirm your permission to participate based on this opening statement. (*Wait for the participant to agree. If the participant agrees to participate but not to be recorded, pause to turn off the recording and then continue.*)

If the interviewee agrees to proceed: Thank you, we appreciate your participation. I will record in my notes your response regarding your consent to participate. Before we start, do you have any questions for me?

If interviewee does not agree to proceed: Thank you for your time; have a good day.

Section 1: Information about the organization

1. We'd like to start by learning a little bit about you and your organization.

    a. When was this organization established?

b. What is the primary service region?

c. What countries does this organization support?

d. Tell us about yourself and your role in the organization.

2. What are the modes by which your organization works with HTA practitioners and stakeholders in the region?

Section 2: Factors driving establishment of this hub, its vision, objectives, and evolution,

3. What were the original vision, goals, and objectives of the hub organization?

4. What were the most important facilitators to getting your organization established and operational?

5. What were the most important challenges to getting the hub organization established and operational?

6. What staffing positions are critical for establishing and operationalizing a new hub organization in the first 2 or 3 years?

7. Can you share with us an overview of the process that was engaged to establish this hub?

8. What was the process for operationalizing the hub?

9. What are the current unmet needs in the region served by your hub organization?

Section 3: Financing and sustainability of this hub

10. What costs were associated with establishing and operationalizing this organization?

11. How was this organization initially financed?

12. What strategies and sources contributed to a stable, sustainable financing base?

Section 4: Thoughts and advice on establishing a hub for the Asia region

As mentioned in the introduction, the purpose of the interview is to get your thoughts and advice so that we can make an assessment and propose recommendations for establishing a hub for HTA support and development in Asia.

If you are not familiar with HTAsiaLink, it is a "collaborative research network of Health Technology Assessment (HTA) agencies in the Asia-Pacific region established in September 2010". They aim to "strengthen HTA research efficiency by sharing HTA information, experiences, and resources within the members", but they are most known for organizing the HTAsiaLink Annual Conference. They are currently not a hub but could potentially become a hub.

13. What do you think about HTAsiaLink evolving into a hub for the Asia region?

14. What other organizations could become a hub for the Asia region?

15. Would your organization be willing and able to support the establishment of an HTA hub organization in Asia?

16. We have reached the end of the interview. We thank you for taking time to talk to us today. Do you have any questions or parting advice you would like to share as we go forward formulating recommendations for an HTA hub in Asia?

D. KII – IMPLEMENTING OR TA AGENCIES

Prefilled interview information

Name of interviewee: _____

Interviewee's organization: _____

Interviewee's position in the organization: _____

Interviewee's location: _____

Interview date: _____

Name of interviewer: _____

Names of interview notetaker: _____

Opening statements

Good morning/afternoon (*name of key informant*). Thank you for agreeing to participate in this interview. My name is _____, and I am conducting this interview on behalf of the USAID-funded Medicines, Technologies and Pharmaceutical Services (USAID MTaPS) Program.

HTA is increasingly being adopted by country decision makers as a tool for producing evidence for decisions about how to best use finite health sector resources. The practice and use of HTA is rapidly evolving in Asia and the USAID MTaPS Program has been charged to investigate how creation of an HTA hub organization in Asia can contribute to that evolution. We have conducted a survey of HTA doers and users in Asia and we are conducting key informant interviews among notable HTA experts in that region to learn more about their visions and demand for an HTA hub in Asia, and to examine possible priorities and combinations of support for a regional hub.

You were invited to participate in this interview because you have been identified as a key informant from an implementing and TA partner organization for HTA. For the purpose of our conversation today, we define an "HTA hub" as an organization whose primary purpose is to promote and support improvements in the environment for doing HTAs and using HTA results for health sector decision-making. Support may include institutional, policy, and/or technical/scientific development.

The goal of this interview is to get your thoughts so that we can make an assessment and propose recommendations for establishing a hub for HTA support and development in Asia. We respectfully request 45–60 minutes of your time to help us in the effort to advance HTA in Asia. Your participation in this interview is voluntary and you may stop at any time. You may skip any questions you prefer not to answer for any reason. Your responses will be completely confidential; other than your name and position in your organization, no personal information is being collected about you. We are recording this interview solely for the purpose of transcription. Once transcription is complete, the recording will be deleted and the transcription will be deidentified. No one beyond our interview team will have access to the association between the transcription and the names of the people with us today for this conversation. A summary of what we learn across all interviews may be submitted to USAID, and if it is, what we share will have no identifying information. We would like to confirm your permission to participate based on this opening statement.

Wait for the participant to agree.

If the participant agrees to participate but not to be recorded, pause to turn off the recording and then continue.)

If the interviewee agrees to proceed: Thank you, we appreciate your participation. I will record in my notes your response regarding your consent to participate. Before we start, do you have any questions for me?

If the interviewee does not agree to proceed: Thank you for your time; have a good day.

Section 1: Organization background on HTA

To start, we would like to ask some simple questions about you and your organization's work on HTA.

1. Tell us about yourself and your work in HTA.

2. Does your organization have a written position statement concerning the role of HTA in health sector policy, planning and decision-making?

We may request a copy or a link to a copy of the document and ask you to provide a summary of that position or policy statement.

3. Has your organization produced policy or guidance documents, guidelines, tools or other documents designed to help HTA practitioners and users improve the practice and use of HTA?

We may request a copy or a link to a copy of the document and ask you to provide a summary of those documents.

4. What HTA-related activities are you and your organization involved in?

5. What is your organization's experience working with HTA hubs and networks?

Section 2: Thoughts and advice on establishing a hub for the Asia region

As mentioned in the introduction, the purpose of the interview is to get your thoughts and advice so that we can make an assessment and propose recommendations for establishing a hub for HTA support and development in Asia.

6. What unmet needs exist in the Asia region related to HTA support and development?

If you are not familiar with HTAsiaLink, it is a "collaborative research network of Health Technology Assessment (HTA) agencies in the Asia-Pacific region established in September 2010". Their aim is to "strengthen HTA research efficiency by sharing HTA information, experiences, and resources within the members", but they are most known for organizing the HTAsiaLink Annual Conference, an "event that facilitates the exchange of HTA knowledge and experience among member agencies and identifies the development plan for the network next year". They are currently not a hub but could potentially become a hub.

7. What do you think about HTAsiaLink evolving into a hub for the Asia region?

8. What other organizations could establish a hub for the Asia region?

9. What would be some activities and initiatives a new HTA hub in Asia could take on in its first 1 to 3 years?

10. What strategies and sources could contribute to a stable, sustainable financing base for an HTA hub in Asia?

11. Would your organization be willing and able to support development of an HTA hub organization in Asia?

12. We have reached the end of the interview. We thank you for taking time to talk to us today. Do you have any general questions or parting advice you would like to share as we go forward formulating recommendations for an HTA hub in Asia?

ANNEX C. KEY INFORMANT ORGANIZATIONAL AND COUNTRY AFFILIATIONS

KII Type	Organization	Country
Donor agencies	ADB	
Donor agencies	BMFG	
Donor agencies	WHO HQ	
Donor agencies, TA	World Bank	
Donor agencies	WHO SEARO	
HTA Practitioners in Asia	MaHTAS	Malaysia
HTA Practitioners in Asia	Center for Drug Evaluation (CDE/HTA)	Taiwan
HTA Practitioners in Asia	HTAC	Philippines
HTA Practitioners in Asia	HITAP International Unit	Thailand
HTA Practitioners in Asia	NUS	Singapore
HTA Practitioners in Asia	Health Strategy and Policy Institute	Vietnam
HTA Practitioners in Asia	NECA, member of HTAsiaLink	South Korea
HTA Practitioners in Asia	HTAsiaLink Board, Indonesia naHTAC	Indonesia
Implementing/TA agencies	Tufts CEVR	
Implementing/TA agencies	CGD	
Implementing/TA agencies	CGDEV, iDSI	
Implementing/TA agencies	HTAi, HTAi APF	
Other hubs	RedETSA	
Other hubs	EUnetHTA, Dental and Pharmaceuticals Benefits Agency	
Other hubs, TA	HTAi	

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