The evaluation of the Health Technology and Policy Assessment Program for Health Resource Allocation report

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Health Intervention and Technology Assessment Program

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2. Background and scope of the evaluation

Following an assessment[1] of the core strategies of HITAP carried out by a team of Thai and UK investigators in 2008/09, at the request of the Thai Health Promotion Foundation, HITAP has initiated a second evaluation, in 2011, this time bringing together a team of UK, Thai and Korean assessors.

These recommendations were the result of data analysis, focus groups, surveys and interviews carried out by the evaluators and draw on the discussions during the presentation of the preliminary findings of the evaluation that took place in Bangkok, between the evaluators and the leadership and staff of HITAP and members of its Advisory Group, in November 2011.

The report will be considered by HITAP and, along with a response by HITAP to the reviewers' recommendations, it will be submitted to external review. The final product will be published by HITAP as a follow-on to the 2009 report – the plan is also for a peer reviewed publication to be developed based on this material.

2.1. The first HITAP evaluation: 2008/09

The Table below summarises the key recommendations from the previous evaluation and a self-assessment by HITAP of progress towards achieving these.

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[1] Evaluating HITAP: 2 years on, December 2009

Recommendations from evaluators	HITAP Progress (2011)
1. HITAP's activities of (a) undertaking policy-relevant research and (b) building HTA capacity in Thailand should both continue to be supported financially on a more sustainable longer-term basis. However, this does not mean that HITAP should become dependent in the longer-run, solely on government funding.	MET HITAP continues doing policy-relevant research. HITAP keeps receiving funding from the Ministry of Public Health (MOPH). Since 2009, HITAP has been expanding the range of its funding agencies. This includes the National Health Security Office (NHSO) under the long-term research project for developing the health benefit package under universal coverage scheme. HITAP also has been granted funds by international organizations such as WHO, ADB. HITAP and partners also are bidding for research funding from the European Commission's Research Programme.
2. HITAP and the Advisory Board should develop a funding strategy including the identification of alternative funding sources and business models suited to the Thai setting.	MET The funding strategy depends on the identification of the organization. In 2010, HITAP conducted a feasibility study on alternative organizational models for future positioning of HITAP, and presented these results to the Advisory Board. The current positioning of HITAP as a governmental but independent organization is appropriate for the Thai setting. More specific positioning with a related funding strategy seem to be needed in order to help focus scarce HITAP resources (especially researchers) into areas with potential for sustainable development.
3. Several decision making bodies in Thailand, including the Subcommittee of NLED and the National Health Security Subcommittee for the benefit package, are end users of	MET HITAP maintains an appropriate relationship with decision makers at different levels. For example, HITAP invited the members of the Subcommittee of NLED, the National Health Security Subcommittee, and Consortium of Thai Medical Schools to attend the annual EE

Recommendations from evaluators	HITAP Progress (2011)
HITAP's products. In order for HITAP's research consistently to inform policy in the future, and for HITAP to be sustainable in the long-run, HITAP needs to build robust long-term relationships with the policy makers and recognize and respond to their individual information needs, whilst preserving their academic integrity.	training. Furthermore, HITAP participates in continuing courses for hospital pharmacists and decision makers at primary level in MoPH. These activities help increase fundamental knowledge of HTA and enhance awareness of evidence-based decision making. Better indicators of robust long-term relationship might be: emerging joint ventures in HTA, collaborative projects, funding for HITAP etc.
4. The Advisory Board should seriously consider the future direction of HITAP. Particularly, whether it should focus on generating knowledge through evidence synthesis including economic evaluation or on translating this knowledge into policy decisions, or both.	NOT MET HITAP continues, as in the past, playing both roles and trying to balance these.
5. HITAP needs to produce a process guideline describing aspects of their work including topic selection, engagement with stakeholders, and challenge and contestability mechanisms. This will make their activities more transparent, increase interaction	MET In 2011, HITAP will be launching the HITAP process guidelines. These will be reviewed by stakeholders including policy makers, healthcare professionals and industry. The completed guideline will be disseminated within 2012.

Recommendations from evaluators	HITAP Progress (2011)
with, buy-in and ownership by stakeholders and make their recommendations more defensible in cases where there is disagreement.	
6. HITAP and its Advisory board should consider restricting the range of topics considered or develop long-term strategy for sustaining their currently broad ranging research activities through, for example, using Thai and international academic research networks or the appointment of additional experienced researchers. This is closely linked to the development of a long term funding strategy (point 2)	NOT MET HITAP has been concerned with this issue since it was established. HTA has a very board multidisciplinary span and it is quite hard to restrict the research topics coming to HITAP. A key challenge for HITAP is to match current capacity and its potential for capacity building with emerging opportunities in order to achieve (yet to be identified) strategic long term goals.
7. Peer review publications are important in terms of maintaining and enhancing research quality and retaining academically-oriented staff, but can be at the cost of providing timely information relevant to Thai decision makers. HITAP and its Advisory Board should develop a clear publication strategy taking into account the resource constraints and long-term	MET As HITAP gives priority to benefit of society, they focus on providing information and evidence to policy makers. So, every research report contains a policy maker-friendly executive summary. Peer reviewed publications benefit both the researcher and his/her organization and are considered as a final step.

Recommendations from evaluators	HITAP Progress (2011)
objectives of the organization.	
8. There is evidence that timeliness in delivering HITAP projects is becoming a concern. HITAP should develop a more strategic staff recruitment and retention scheme, including recruiting or involving more experienced researchers that could have an immediate impact in terms of HITAP's productivity.	NOT MET The small numbers of experienced staff continues to be a concern.
9. The current model of professional development at HITAP is based predominantly on on-the-job training and close mentorship between HITAP employees. However, as the organization expands and workload increases such a model may not be sustainable HITAP and its Advisory Board should develop a strategy for continuous professional development relying on formal rather than personal relationships.	NOT MET However, HITAP has further developed the on-the-job training model. HITAP assigns more experienced researchers as team leaders for providing primary consultation and working together with principal investigator. This model seems to be improving the technical capacity and knowledge of staff, according to the 2011 evaluation. For future evaluation, it may be more valid if average number of peer reviewed publications per PI increases on the basis of the PIs major contribution rather the current need for substantial efforts from senior researchers.
10. Strong leadership is important in establishing and maintaining links with policy makers and funders and inspiring HITAP staff. The Advisory Board should develop a strategic plan	NOT MET HITAP and the Advisory board have not yet considered this issue but are in the process of doing so.

Recommendations from evaluators	HITAP Progress (2011)
both for supporting the current leadership and for longer-term succession planning purposes. Future development of HITAP's activities requires that the Advisory Board reviews the academic/technical, mentorship, administrative and advocacy responsibilities of the leadership	

2.2. The five strategies

The five HITAP strategies (strategy 5 was added to the four strategies evaluated in 2008/09) were allocated across the five reviewers as shown in the table below.

Evaluator	Strategy
Kalipso Chalkidou	I: Research and development of a fundamental system for HTA
Jirawat Panpiemras	II: Capacity strengthening for HTA at both individual and organizational levels as well as for the Thai Health systems
John Cairns	III: Assess health technologies and policies in regard to public policy
Paibul Suriyawongpaisal	IV: Research dissemination to policy makers, medical practitioners, and the general public
Jeonghoon Ahn	V: Development of organizational management and encouragement of connections between academics and involved parties at both national and international HTA organizations

2.3. The report's target audience

The target audience of this report is: (a) HITAP, and, (b) the HITAP Advisory Committee. This brief sets out our findings from evaluating the five HITAP strategies and our recommendations for consideration by HITAP and its Advisory Committee.

3. Key findings

Below we give a summary of the key findings and recommendations of the evaluation for each of the five strategies. Additional parts of the report that informed this analysis can be made available to HITAP upon request.

3.1. Strategy I

For the 2011 review, HITAP has identified 4 core methodological projects that will inform the way the agency evaluates and interprets evidence. These are the following:

a. Improving and updating the National Thai database of HTA

b. Developing tools and utility/quality of life measures (EQ-5D-5L) for use in Thailand

c. Surveying the Thai society's willingness to pay per QALY for informing an appropriate decision-making threshold in Thailand

d. Compiling standard cost lists for both healthcare and non-health care costs to be applied in HTA

All four areas are briefly described below and a commentary included on the way the questions have been identified and addressed.

3.1.1. Methods & Sources

For the 2011 evaluation, we concentrated on the four projects identified by HITAP as the key methodological and process-related priorities, as set out above, with a focus on the methodological rigour of the analytical work for evaluating and improving the topics selected. Some of this work is on-going. As there is no standard methodological approach, the analysis is based on a rapid review of the international literature and of material (published and unpublished) provided by HITAP as well as personal communication with principal investigator staff, where necessary. The review concludes with a short discussion of the process followed for identifying these methodological priorities. We use as a possible example/comparator the process followed by the Medical Research Council in the UK recently to identify (and subsequently fund research into) the key methodological research priorities of NICE.

3.1.2. The improvement of the Thai national database for HTA - http://www.db.hitap.net/

The database is an excellent resource of highly relevant information to policy makers, researchers, professionals, students and service users as indicated by the increase in the

number of visitors and registered members and the positive feedback from the survey conducted in 2009 (albeit, the response rates were too low for the results to be reliable – 16%). The database offers free access to a wide range of studies relevant to the Thai setting, in both English and Thai, as well as an increasing number of accompanying reviews (work in progress) of the strengths and weaknesses of the published analyses to help users assess their relevance to their own setting and their validity, based on the Thai HTA Guidelines for HTA. However, there are several ways in which the evaluative effort (impact assessment) and the database itself could be improved in the future. Some suggestions are offered below:

- Consider collecting data on visitors rather than hits (or at least consider measuring pageviews or visits). Offer a definition of "visitors" – e.g. unique IP address for 2-24hr period. Number of hits is an unreliable marker of use of an electronic site (for example, a webpage with a large number of images may generate a large number of hits per visit).[2]

  - Consider whether IP recognition (public/private; academic or other institution/individual) is possible. Also, consider collecting and presenting breakdown by country of origin of visits/visitors.

- Repeat the electronic survey and try to increase the response rate through, for example, repeat reminder emails; offering personalised invitations (and even questions) to certain types of user (e.g. policy makers or researchers).

- Run the survey for all users and not only registered members, using an online survey tool, which would 'open' (but could be bypassed) when a user first visits the database.

- Consider the possibility of focus groups or a few in depth interviews with users (not only members), personalised to each user background (e.g. students, researchers, policy makers, patients). Concentrate more on policy makers and professionals who use the database to make specific policy and treatment decisions.

- Include in the evaluation two components: (a) user friendliness of the database and (b) relevance of the included material/information

Through better understanding the profile and needs of the users, the database can be improved both in terms of its user-friendliness and also the usefulness/relevance of its content, which would, in turn, increase the number of users and its impact on health policy

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[2] See for example, Measuring Web traffic, IBM, http://www.ibm.com/developerworks/web/library/wa-mwt1/

and practice.

3.1.3. The development of tools and utility/quality of life measures (EQ-5D-5L) for assessing cost utility in Thailand

Developing a Thai version of the five level EQ-5D is a worthwhile endeavour given the central role of economic evaluation using the Quality Adjusted Life Year as the key outcome measure and the weaknesses of the three level version. In order to better inform this work, during the design stage of the research, the Thai team could consider the following:

- What are the lessons from the initial EQ5D project (3L)? How is the team planning to address these in the 5L valuation study? For example:

  - How is the problem of inconsistent responses to TTO scenarios going to be addressed? Would, for example, oversampling from the inconsistent group be a way of addressing this?

  - How will the researchers ensure the representativeness of the sample?

- How is the existing EQ5D tool being used (its weaknesses notwithstanding) and how well integrated is it in the Thai decision making system? For example,

  - Are Thai trials using EQ5D or is EQ5D being used in routine practice as a means of collecting Patient Reported Outcome Measures?

  - Do Thai decision makers understand EQ5D and its relevance/uses? How do they regard it?

3.1.4. The willingness to pay per QALY of Thai household survey for determining a basis for a HTA threshold in Thailand

This is an important piece of work, which could directly inform the way HTA is used by policy makers to make technology adoption decisions. It will complement the earlier (2008) study and offer comparative data from other Asian countries.

- As this research is still at the design stage, there is limited feedback to be offered, though the experience of EuroVaQ in terms of methods as well as its strengths and weaknesses, may be of relevance.[3]

- What is the purpose of the project? Is it primarily research and capacity building amongst HITAP researchers as well as brand strengthening internationally for HITAP or is there a

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[3] European Value of A Quality Adjusted Life Year http://research.ncl.ac.uk/eurovaq/

more specific policy aim which will inform the way the country makes resource allocation decisions (through influencing the total health budget and/or the threshold)?

- In addition to WTP studies, HITAP ought to consider empirical evidence of substitution/adoption/disinvestment from services in the real world, in order to ensure the threshold ceiling established is not at odds with the overall budget allocated to health services and technologies. In other words, unless the WTP studies directly influence the total budget allocated to healthcare, relying solely on this type of evidence to establish a ceiling may result in crowding out of services not formally put through cost-effectiveness analysis and have an inflationary effect. This is particularly important for health insurance systems with explicit positive lists and predetermined budgetary allocations (more so than in the case of tax-funded systems with negative lists such as the UK's NHS).

- Would it be appropriate to consider WTP by health insurance system respondents are registered with, especially given the discrepancies between spending between the different schemes in Thailand?

- The researchers ought to consider before the study is completed, how they will handle possible findings such as, for example, very high WTP compared to the country's GDP per capita (see earlier point), or a great discrepancy between prevention and treatment thresholds, with prevention faring much worse than treatment interventions.

- It is important to highlight how WTP or other thresholds are only one input when making resource allocation decisions so that policy makers do not consider this as the most important criterion when setting priorities

3.1.5. The development of a standard cost list for informing Thai economic evaluations

Setting out unit costs is a necessary requirement for carrying out HTA aimed at informing decision makers.[4] Therefore, this work is an important first step in standardising the HTA process in Thailand. The HITAP team may wish to consider:

- Establishing standard costs is not a one-off exercise. Clear timelines on updating the list should be set out along with priorities for improving the list.

- Is the cost of pharmaceutical products or of medical devices or diagnostic tests included in the list?

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[4] For a discussion of the types of cost and challenges in costing in the context of economic evaluation/decision analytic modelling, see here:Miners, A., NICE Decision Support Unit, 2007 http://www.nice.org.uk/media/4A6/1B/FinalBriefingPaperCosts140607.pdf

- How are medical services coded and costed (e.g. DRG – costing by spell/episode of care)? Is there a standard coding methodology? Are there plans for using the hospital RVU to inform DRG weights currently on in the future?

- Making a recommendation as to which costs: i.e. local vs. national, ought to be used in economic evaluations and budget impact analyses, given there is significant variation in unit costs across providers (even in the presence of a national tariff, as is the case in the UK, both pharmaceutical and medical service prices may differ significantly across geographical regions).

- Consider the value of developing a costing guide distinct from the HTA Guidance. Costing follows accounting principles, which may differ from HTA rules. For example, costing time horizon tends to be shorter than that of economic models; the perspective is that of those purchasing services (as opposed to an often broader perspective adopted by economic models); unit costs may follow the national tariff (as opposed to real/average costs used in HTA models); opportunity costs are rarely considered in costing/actuarial models and neither are productivity costs (which are rarely direct costs for those purchasing the services). For an example of the issues one may wish to consider in costing, see the NICE costing guide.[5]

3.1.6. The need for a topic selection process for methods research

HITAP has a global reputation for using high quality evidence and values to inform national decisions on efficient and equitable resource allocation, in Thailand. Strategy I is very important in improving the products HITAP delivers to its audiences in Thailand, and abroad, hence, enhancing this reputation. HITAP ought to continue its good work and aim to publish and publicise (as it is currently doing) its methods research in order to inform other HTA agencies faced with similar challenges. In addition, HITAP should consider ways for capturing the <u>impact</u> of its methods research findings on its own methods and processes as well as on the way HTA research is understood and used by other Thai stakeholders. Finally, HITAP ought to improve the process by which it identifies key methods priorities and researching those, in the future, *through an explicit topic selection/prioritisation process.* (see references [6],[7] for an example of a

[5] The NICE Costing Manual, NICE, Aug 2011
[6] MRC-NICE Scoping Project: Identifying the National Institute for Health and Clinical Excellence's Methodological Research Priorities and an Initial Set of Priorities,
http://www.york.ac.uk/media/che/documents/papers/researchpapers/rp51_identifying_NICE's_methodological_research_priorities.pdf
[7] Methodological research to underpin NICE decision making,

http://www.mrc.ac.uk/Fundingopportunities/Calls/NICEdecisionmaking/index.htm

methods priority setting process followed recently in the UK by NICE and the UK's Medical Research Council)

3.2. Strategy II

The objective of strategy II is to build up the individual's competence and capacity in health technology assessment for serving HTA organizations in both the short run and long run, as well as to gather related knowledge and develop a principle for expanding human capacity. Under strategy II, there is internal capacity building, aiming to improve the capacity of HITAP's staff, and external capacity building, aiming to improve the capacity of other organizations. The internal capacity building activities, which are the focus of this evaluation, consist of on-the-job training and mentorship, providing scholarships for further study, a journal club, presentations at international conferences, participating in HTA training and seminars, and an office meeting. The external capacity building activities are annual training arranged by HITAP and the regional training on advanced modelling held in July 2010 with York and Glasgow Universities. Given the fact that all external capacity building events have been regarded as successful in terms of participants' satisfaction with the training course, we focus, in this report, on the evaluation of the internal capacity building activities. [8]

3.2.1 Methods & Data sources

Data used in this section came from a survey of HITAP research staff conducted in November 2011. The surveyed sample includes 30 researchers (4 mentors and 26 regular researchers), accounting for 91% of active research staff. [9] The questionnaire is designed to capture changes since the first evaluation. In addition, we conducted a focus group of HITAP's researchers to gather some specific information, particularly relating to problems and obstacles associated with the human capacity building strategy. Data on the structure of HITAP research staff and delayed projects were provided by HITAP.

3.2.2 Findings and recommendations

Current HITAP human capital

Compared with the first evaluation in 2008, there is a significant upgrade of HITAP research

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[8] In fact, the evaluation of the annual trainings has been regularly done by HITAP so we will not attempt to redo it again in this report. According to the evaluation done by HITAP, its annual the trainings were highly regarded as successful events.
[9] The survey excludes on study-leave research staffs.

staff both quantitatively and qualitatively. From 2008-2011, the total number of researcher staff has increased from 21 to 33. Seven master-degree researchers and two Ph.D. researchers have been added to the research unit. The number of mentors has slightly increased from five to six, although the number of full-time mentor has not changed, remaining at two persons.

Average years of research experience for a non-PhD researcher have increased from 2.14 years in 2008 to 3.09 years in 2011.[10] However, the increase is mostly driven by the increase in the experience of old researchers rather than the increase in the experience of newly added researchers. That is, during the last 2-3 years, HITAP has been able to maintain most of their research staff but appears to have failed to recruit new researchers with intensive research experience. Most of the HITAP newly recruited researchers are still young and inexperienced, and thus cannot provide a much needed immediate impact on HITAP research productivity.

Workload, sufficiency of resources, and delay of delivering projects

The first evaluation revealed many problems related to HITAP human resources. As a consequence of a mismatch between workload and the number of research staff, timeliness in delivering HITAP projects was becoming a concern. There were also concerns of whether there were sufficient numbers of mentors and whether sufficient mentor time was allocated to facilitate an effective learning experience through on-the-job training. Moreover, a significant proportion of research staff thought that there was insufficient supporting staff. The quality of existing supporting staff was also found to be an issue.

Results from this evaluation show that some problems that were detected in the first evaluation have been alleviated, while some others persist. Moreover, a new area of concern is also identified. Main results are as follows:

- First, as a result of an increase in the number of research staff, a decrease in an average workload and, perhaps of more efficient project management, project delay has been significantly lessened.[11]

- Second, mentors are arguably the most important contributor to the on-the-job training. The success of the training, particularly for inexperienced researchers, relies heavily on the extent to which researchers could access mentors and how much consulting time mentors could provide. However, mentors' consulting time as well as accessibility might

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[10] Results are from 2008 and 2011 surveys.

[11] The workload here is defined as the number of new projects that in a particular year. Based on 2008 and 2011 surveys, for the regular researchers the average workload has reduced from 2.9 in 2008 to 2.4 in 2001, and for the mentors (excluding the director of HITAP) the average workload dropped from 5.3 in 2008 to 4.75 in 2001.

be insufficient. 76% of the surveyed researchers think that consulting time is moderate. 84% of the surveyed researchers think that access to mentors is convenient sometimes. Main reasons are that mentors are usually busy, and some mentors work part-time and thus do not come to the office on a regular basis.

- Third, despite an increase in the size of the research unit, about 70% of the surveyed research staff think that the number of research staff is still insufficient. The most needed field is statistics.

- Fourth, although the average workload has appeared to have been reduced, there are concerns about heavy non-research workload e.g. preparing/issuing conference/seminar invitation letters associated with both research projects and non-research projects (e.g. training and dissemination). About 46% of the surveyed research staff feel that the amount of non-research work that they have to cope with is heavy and could negatively affect the quality of research work since they would have less time to spend on research. To deal with this issue, HITAP might consider setting up a secretarial unit to carry out non-research work associated with research projects and/or non-research projects.

- Fifth, more administrative staff, especially ones who are fluent in English, might be also needed to help HITAP operate more effectively. High-quality administrative staff, e.g. those with good command of English, could provide immediate help with the heavy non-research workload allowing researchers to focus more on their research.

- Last, limited working space is found to be a new concern. 43.33% of the surveyed research staff think that research facilities are not enough to facilitate effective research activities. Almost all of them pointed out that the office space is too small to effectively conduct their research.

- **Internal capacity building and skill development of HITAP research staffs**

- Generally, internal capacity building activities such as on-the-job training, office meetings, and external seminars/training are regarded as helpful in fostering research skill. However, the extent to which activities are helpful varies quite substantially.

- On-the-job training is regarded as the most helpful activity by encouraging participation and knowledge transfer, followed by external seminars/training, journal club, and office meetings. Almost all surveyed researchers view on-the-job training as a "very helpful" activity; roughly 30% of the surveyed researchers view external seminars/training and

journal club as "very helpful" activities; while less than 10% of view office meetings as a "very helpful" activity. However, it should be noted that the helpfulness of on-the-job training could be undermined due to insufficient mentors' consulting time and inconvenient access to mentors.

- Unanimously, HITAP research staff think that working at HITAP helps increase their research skills and knowledge about HTA and health policy. This happens mostly through the process of the internal capacity building. Moreover, HITAP has given learning opportunities to its young research staff by encouraging them to play more challenging and important roles in research projects, such as being a team leader and advisor of a project. This learning-by-doing will surely be a valuable experience to the young researchers.

3.2.3 Concluding thoughts

In general, regarding strategy II, HITAP has done quite well. The results of this evaluation clearly show improvement over the first evaluation. However, we still have not seen that HITAP has followed the recommendations suggested in the first evaluation. Specifically, HITAP has not yet developed strategic staff recruitment and retention schemes. HITAP still appears to lack full-time mentors and personnel in some areas of expertise, e.g. statisticians and supporting staff with good command of English. Therefore, we encourage HITAP to come up with strategic staff recruitment and retention schemes to ensure the effectiveness of the internal capacity building and high-quality research.

3.3. Strategy III

Although all five of HITAP's strategies are important, Strategy III can be argued to be the core activity of HITAP given its history and its current positioning. Strategy III concerns undertaking HTA to address the needs of Thai policy makers.

3.3.1. Methods & Sources

The raw material to inform judgements regarding HITAP's success or otherwise with respect to undertaking relevant HTA were the descriptions of projects completed and ongoing, and the outputs from these projects, and particular emphasis was also placed on HITAP's publication record. Thus the emphasis here was on the production of information. Issues around the dissemination of the information to policy makers, and other stakeholders, are taken up under strategy IV.

3.3.2   Summary of findings

HITAP have an Impressive track record of delivering HTA for policy makers. The topic selection process is discussed below under Strategy IV.   The importance of this process cannot be underestimated because the relevance of the projects undertaken to Thai decision makers is to a large extent assured by the topic selection process.   As discussed more fully below a large majority of projects were judged to have had some impact on policy decisions and in 14 cases they are believed to have had a major influence.

	2007	2008	2009	2010	2011
Completed projects (by start year)	22	11	16	5	1
Ongoing projects			20		

The quality of the HTA undertaken by HITAP is partly attested by the reported influence the various studies have had.   An independent indicator is the publication of papers in peer-reviewed journals.   The importance of publication of outputs from the various projects, and in particular, peer-reviewed publication cannot be overemphasised and goes much further than providing confirmation of the quality of the work. While it is an important means of assuring and increasing the quality of HTA outputs, it is also central to developing the skills and the careers of researchers, and to raising both the domestic and the international profile of HITAP.

The table below presents a comparison of the distribution of publications in domestic and international journals in 2007-2008 and 2009-2011. It also presents a classification of publications into specific HTA studies and general papers about HTA.   Such a classification is a judgement about which there can reasonably be disagreement.   The first point to note is the expanding output of peer-reviewed publications and the increased international share when comparing the later time period with the earlier one.   This improving publication record will definitely be enhancing HITAP's profile and status.   The second point is the continued emphasis on general studies about HTA, as opposed to specific HTA studies.   It is not clear if there is a strategy that is being pursued and the distribution of papers reflects this or whether the figures in the table are simply the result of many individual decisions uninformed by an

underlying strategy.

	Domestic	International	Total
	2007 - 2008		
Specific HTA studies	4	3	7
General papers about HTA	7	4	11
	2009-2011		
Specific HTA studies	10	9	19
General papers about HTA	4	15	19

HITAP performs numerous balancing acts: between the generation of evidence and its dissemination; building and sustaining networks with interested parties in Thailand and externally and devoting more time to working directly with policy makers; undertaking more studies and publishing high quality papers from existing studies; and so on. These activities are all valued, and will generally benefit each other but it remains the case that they all compete for the same limited pool of resource, in particular, experienced researcher time.

The balancing act is also very evident within Strategy III. What weight should be given to the production of HTA reports versus domestic and international publication? How important is the publication of specific HTA studies versus general papers about the HTA process and overviews of HTA research? What is the relative benefit of addressing policy maker needs with respect to specific topics versus creating and sustaining an internationally recognised centre of HTA excellence.

While different activities can meet multiple goals and success in one area can enhance other activities there is an opportunity cost, thus it is important to have a clear strategy for dealing with the fundamental problem of not being able (at least in the short term) to do more of one desirable activity without doing less of another.

3.3.3   Recommendations

There is a need for a clearer publication strategy which would inform decisions as to how staff time is distributed across publication activity and other activities, and also would guide decisions about what type of publications and in which outlets.

Scope for more formalised routine feedback of perceived usefulness and timeliness of the different HTA outputs

3.4.   Strategy IV

Since 2010 HITAP has put more emphasis on research dissemination by upgrading this function to a separate strategy for which a specific functional team (knowledge translation/information technology) has been established[i]. There are four key elements to this strategy.

1. To encourage stakeholders' participation in prioritizing and selecting research topics

2. To allow policy makers and stakeholders to be involved in research topic selection, and reviewing research results for policy recommendations

3. To present research results to particular stakeholders through appropriate communication channels, for example, translating research knowledge into policy decisions via policy formulations

4. To keep structures and content of organizations' websites updated

Findings pertinent to the four elements are briefly described below and a commentary included on the way the questions have been identified and addressed.

3.4.1.   Methods & Sources

The four elements of strategy IV were assessed using review of relevant documents supplied by HITAP (e.g. annual reports, newsletters, publications); focus group interview with HITAP team responsible for this strategy, individual interview with selected members of the NLED committee, a major user of HTA products since 2008 and with individual HITAP staff (the executives and researchers).   Personal observations of the evaluator gained as a direct observer and participant to certain HITAP activities were also included.

To encourage stakeholders' participation in prioritizing and selecting research topics

Probably, a major achievement of HITAP contribution to policy formulation in health care financing is the adoption of a topic selection and prioritization process as a standard practice in policy formulation by the Benefit Package Subcommittee under the National Health Security Board since October 2009. Future expansion to other policy bodies in this respect will not only contribute to evidence-based policy decisions but also ensure long term sustainability of HITAP as an HTA agency.

Although, the protocol for topic selection and prioritization is clearly inclusive and systematic[ii], there have been significant variations in practice due to many factors such as inaccessibility of current knowledge, limitation of expertise or budget, subjectivity of the eight criteria for topic selection. For instance, topic selection on emergency medical services (EMS) was limited by inaccessibility to recently unpublished reports which rendered the selected topics less relevant. When the investigator team realized this deficit during the pilot phase, revision of topic selection followed leading to some adjustments. This reflects flexibility in project management and willingness to learn of HITAP researchers.

Since 2007, HITAP has continually improved the topic selection process such as increasing the duration of topic nomination from 1 to 3 months to enhance the contribution from health care providers and regional offices of MOPH; including health professional bodies and pharmaceutical industry in addition to public health insurance agencies and MOPH so that scope of topic nomination would be expanded[ii]. With a systematic approach and continuous improvement of the process, HITAP has set a good example for other public agencies to follow[ii]. Adherence to continuous improvement of the process is, thus, strongly recommended.

To allow policy makers and stakeholders to be involved in research topic selection, and review of research results for policy recommendations

The sometimes complex technical details of HTA methods challenged HITAP's ability to convince many target audiences with limited technical background and/or motivation to make use of evidence in policy decisions, despite the participatory approach in topic selection and review of research results. This could result in a failure of target audiences to provide researcher requested data and inadequate opinion sharing (as evident in a project dealing with

the system of emergency medical services). This is an example of just 1/6 of total research projects with no influence classified by HITAP.

Through the participatory approach, yet, HITAP has realized limitations of economic evaluation as a policy decision tools. This realization as evident in a HITAP report[iii] led to concrete remedial actions such as networking with international experts in priority setting leading to a PhD graduate in this specific area and some published papers in international peer review journals[iv][v].

In addition to serving institutional-based policy makers, a key informant suggested HITAP extends its service to consumer groups. The Women Health Initiative study is a good example of HTA research originated from consumer groups concerning the controversy of benefit and harm of long-term hormonal replacement therapy. This example indicates a need to build research-based constituencies to support long term investment of HTA.

To present research results to particular stakeholders through appropriate communication channels, for example, translating research knowledge into policy decisions via policy formulations

In comparison to the first 2 years, HITAP opted for explicit planning of knowledge dissemination (plus contingency plan) and keeping track on degree of influence its research outputs might have on policy decision. According to its annual plan of knowledge dissemination, multichannel approach was considered with attempt to tailor made to particular target group on trial and error basis.   Although direct assessment of the impact of tailor made communication is difficult, HITAP had made use of feedback from mass media professionals whereby it found informative and useful to improving design of research contents. HITAP might consider more systematic approach in assessing its communication practice using tools such as strategic communications audits[vi].

With contingency plan to cope with unexpected circumstance, HITAP managed to persuade pediatricians to participate in a research project when facing with unexpected competing commercial exhibition.   Through regular after action review, successful use of contingency plan could probably be converted into standard protocols.

With improved tracking of knowledge dissemination, HITAP was well informed as to impacts of its research on policy decision. Out of 48 completed research project during 2007 to 2011, 84% did have some influences on policy decision with 29% having major influence. Except for 2010, the proportion of projects with major influence had been consistently maintained at roughly 30% since 2007 and the number of finished projects had been quite the same ranging from 10 to 15 annually. This was achieved despite high turnover rate among those in charge of strategy IV over the period, the consistent outputs and impacts as described clearly indicates significant adaptive capacity of HITAP.

Engagement in a series of public debate on glucosamine case extended for a few weeks of high intensity was actually a good case of increasing HITAP visibility. However, it could be a risk of crossing a fine line between academic institute and activist organization.

Finally, to further enhance its profile, HITAP established a number of international linkages such as HTAsiaLink. Through the Link, a collaborative study was organized to compare values of a QALY across countries[vii]. Another example was HITAP organized training with the University of York on advanced modelling in health economic evaluation 2010 aiming at international and Thai audiences. Increased international recognition thru these activities, HITAP could potentially gain more recognition among Thai audiences as well.

To keep structures and content of organizations' websites updated
Database of Health Technology Assessment established by HITAP in January 2008 is considered a key structure supporting HTA[viii]. Subsequent assessment by HITAP researchers revealed that the database included 471 full economic evaluation studies, 155 randomized controlled trial studies, and 106 quality of life studies over the first 11 months of operation. In this period, the number of new members and visitors per month increased from 10 to 40 and from under 300 to over 1500, respectively. The assessment also identified strengths and weaknesses of the database. This self-initiated systematic feedback to the database development is a good indicator of HITAP commitment to evidence-based improvement of its key supportive structure of HTA. Again, this is a good practice to be maintained.

3.5. Strategy V

HITAP introduced a new strategy V in 2010, which aims to development of organizational management and encouragement of connections between academics and involved parties at both national and international HTA organizations. There are four major activities related to this new strategy as follow:

1. Health Policy Research Network

2. Collaboration with the consortium of Thai Medical Schools

3. HTAsiaLink Newsletter

4. Other International HTA collaborations

The details of the aforementioned activities are described in the following subsections.

3.5.1. Methods & Sources

The four major activities were identified by HITAP and review process was based on documents submitted by HITAP team assigned to this strategy and discussion with key personnel involved with these major activities.

3.5.2. Summary of findings

There were two projects classified as Strategy V in 2010 (out of 18 projects) and one project in 2011 (out of 14 projects). The aforementioned four activities were not part of these projects.

Health Policy Research Network (HPRN) consists of small-to-medium research units from both academic institutes and research organizations related to the Ministry of Public Health. HITAP hosted the first annual conference of HPRN and performed 9 joint projects with researchers from HPRN though 6 projects were in 2009.

HITAP's collaboration with the consortium of Thai medical schools are focused on providing training programs to the consortium member medical instructors. Among these programs, the advanced HTA program participants were encouraged to develop a research proposal and about 6 projects will be started from these proposals.

HTAsiaLink newsletter is an important networking tool among the HTA agencies and academia interested in HTA. HITAP is one of three founding members and hosts editorial office for the newsletter.

Other international networking activities which HITAP engaged in are 1) the International Network of Agencies for Health Technology Assessment (INAHTA), 2) academic consulting for community health initiative for maternal and child health in Myanmar, 3) joint project on cost effectiveness threshold in Asian countries, 4) promoting HITAP's work in various international conferences, and 5) publications in international journals.

3.5.3. Recommendations for each part of the strategy

HITAP's HTA networking activities are very impressive, especially their international collaborations and educational activities to spread HTA methodology in Thailand. To maximize dissemination of HITAP's research results and authority, more consistency in seeking for joint project opportunities with various parties may be necessary.

HPRN is a good networking effort to connect with domestic partners. This network is growing in terms of number of participants, however, joint projects seem discontinued since 2010. Joint project is an important tool for moving the network forward, hence, more consistent efforts to keep joint projects working is necessary.

Collaboration with consortium of Thai medical schools seems successful, especially in terms of promoting HTA in Thailand. More clinical experts who understand the concept of HTA and are willing to work with HITAP will enhance the capacity of HITAP and will contribute to the supply of valuable human resources to HITAP.

HITAP takes a leading role in collaboration among HTA organizations and people interested in Asia. HTAsiaLink newsletter is an important connection for these organizations and people. Through HTAsiaLink, a joint project on cost-effectiveness threshold in Asia is started IN 2011. Expansion of this type of joint project is a good way to promote participations from non-member countries in the region. Strengthening networking activities through annual conferences and exchanging staffs are recommended for the future.

International networking activities are one of major strengths of HITAP. HITAP is also successful in publishing international peer review journals. More efforts on publishing specific HTA results might be useful to enforce HITAP's authority.

3.5.4. Concluding thoughts

Collaboration with professional societies are more important than other networking activities since 1) it will contribute to the HITAP's authority; 2) it will increase the chance to make real change in practices; and 3) it can provide important human resource to HITAP – clinicians who wants to collaborate with HITAP (these collaborators can even help better interpretation of HITAP research findings). In strengthening the networking with other parties, joint projects and fellowships are two important means. If HITAP can find appropriate partners, matching fund projects/fellowships can be an ideal type of joint projects/fellowships. Broadening funding base and seeking for alliance with groups with common interests are always important for HTA organization like HITAP.

4. Discussion and high level recommendations on strategic direction

HITAP have continued to build on the success of their first two years. Their record and resulting reputation provides a solid base for the future.

HITAP clearly faces many opportunities in the next few years, partly this reflects an increasing interest in HTA from many different stakeholders and an appetite among decision makers for high quality evidence to assist them when making decisions. The extent of opportunities are clearly also not simply arising from a general trend worldwide but also highlights HITAP's sustained success.

These opportunities include:

- to play a leadership role in HTA in Asia and to support the broadening of high quality HTA in Thailand

- an increasing willingness of medical schools and other academic institutions to work with HITAP because of HITAP's growing reputation

- to broaden HITAP's research portfolio e.g. to engage more fully in research around health promotion

- to further build HTA capacity in Thailand

Changes in the Thai decision making context clearly create increased uncertainty regarding future funding for HITAP and the position of HITAP. Consequently it would be advisable for HITAP to seek to broaden its funding base and to build more alliances throughout groups in Thailand with interests in generating and using HTA evidence.

Still more importantly there needs to be a clear view of the direction in which HITAP should be heading. While there is evidence that HITAP is responsive to changing circumstances and can adapt and change accordingly, it is less clear that there is an overall strategic plan. A contributory factor may be a lack of consensus on the most valuable longer term role and position of HITAP.

We recommend the development of a set of Key Performance Indicators with respect to each strategy. While these clearly will only be able to capture some aspects of HITAP performance they will provide a means of making the period review of HITAP activities more routine, and can give an indication of the extent to which HITAP is on track between the periodic reviews.

5. Appendices with analyses if required

[i] HITAP Annual Report 2010.

[ii] Jomkwan Yothasamut, Pitsaphun Werayingyong, Yot Teerawattananon. Priority setting in health technology assessment in Thailand: experience from the health intervention and technology assessment program. Journal of Public Health and Development. Vol. 7 No. 2 May - August 2009.[in Thais]

[iii] Sripen Tantivess, Yot Teerawattananon and Anne Mills. Strengthening Cost-Effectiveness Analysis in Thailand through the Establishment of the Health Intervention and Technology Assessment Program. Pharmacoeconomics 2009; 27 (11): 931-945

[iv] Sitaporn Youngkong, Rob Baltussen, Sripen Tantivess et al. Criteria for priority setting of HIV/AIDSinterventions in Thailand: a discrete choice experiment. BMC Health Services Research 2010, 10:197http://www.biomedcentral.com/1472-6963/10/197.

[v] Rob Baltussena,*, Sitapon Youngkonga,b, Francesco Paolucci et al. Multi-criteria decision analysis to prioritize health interventions: Capitalizing on first experiences. Health Policy 96 (2010) 262–264

[vi] Coffman J. Strategic communications audits. Communications Consortium Media Center. October 2004. http://www.mediaevaluationproject.org/WorkingPaper1.pdf

[vii] HTAsiaLink. NEWSLETTER TO STRENGTHEN COLLABORATION AMONG HTA AGENCIES IN ASIA. Volume 2 : July-Oct 2011

[viii] Nattiya Kapol, Surasit Lochid-amnuay, Rapeepun Chalongsuk et al. Database of Health Technology Assessment: Development and Implications. HSRI Journal. Vol. 4 No. 2 April - June 2010.[in Thais]

Chapter 2

HITAP's responses to key recommendations

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HITAP places emphasis on organizational assessments conducted by external evaluators. After obtaining the assessment results, the opinions and recommendations are taken into consideration by HITAP during important meetings, such as staff meetings, annual action plan meetings, and steering committee meetings in order to look into problems seriously and find solutions for organizational development.

To create complete and effective reports, HITAP summarizes the important recommendations obtained from the meetings, which is separated into 5 strategies as follows:

Strategy I: Research and development of a fundamental system for HTA

1

Recommendations
There is a need for a research topic selection process in Strategy 1. HITAP ought to improve the process by which it identifies the key methods used to prioritize research topics through an explicit topic selection/prioritization process.
Responses
In the past, the selection of research topics in Strategy 1 was based on the basic necessities of technology assessment in Thailand. In its initial stages, HITAP placed emphasis on basic knowledge development for health technology assessment in Thailand. This was done with the aim of standardizing the HTA methods in the country. Economic evaluation studies in Thailand and the development of health technology assessment in Thailand (1986-2006) were reviewed in order to identify obstacles. In addition, a survey among involved stakeholders, such as policy makers, departments both inside and outside of the Ministry of Public Health, practitioners, academics, the private sector, etc was performed to determine their knowledge gaps. Next, the priority topics concerning HTA methodologies were reviewed, studied, and

developed. HITAP continually carried out activities from Phase 1 to Phase 2, such as the development of health technology assessment guidelines in Thailand, the development of databases for health technology assessment in Thailand during Phase 1 (2008-2010) and Phase 2 (2010-2012), the development of instruments and a utility approach or quality of life (EQ-5D-5L) for cost-utility analysis in Thailand, the assessment of willingness-to-pay per quality adjusted life year to determine the criteria of cost-effectiveness for health technology assessment, and the standard cost lists for health technology assessment.

The results and findings from the researches in Strategy 1 are beneficial for HITAP and for Thailand in establishing health technology assessment systems for the country. However, to facilitate awareness of increases in demand, HITAP will, in the future, hold meetings to determine the priority of research topics for Strategy 1, and determine a reasonable period of time to update existing instruments and databases.

2

Recommendations

The results and findings obtained from the research and development in Strategy 1 are highly important, for example, as research instruments, guidelines, and databases for health technology assessment. However, HITAP should have a means to ensure that those produced outputs are properly utilized.

Responses

HITAP develops instruments and databases to facilitate the use of HTA technology assessment records in Thailand by establishing HTA database from all HTA studies conducted in the country. HITAP realizes that there are various levels of utilization ranging from individual to organizational changes in national policies. Therefore, the monitoring of how the research is used should be planned systematically. HITAP plans to develop a monitoring and registration system for instrument/research utilization in order to learn the results and instruments developed by HITAP, and to conduct survey studies to assess the satisfaction of, limitations of,

and recommendations for use. This process shall be included in HITAP's proposal in the next phase.

Strategy II: Capacity strengthening for HTA at both individual and organizational levels as well as for the Thai HTA systems

3

Recommendations

HITAP should realize that human resources such as researchers, research assistants, and supporting teams are key assets of the organization. HITAP should develop solutions to solve "the lack of human resources" at all levels, select the right person for the right job, and provide work support in terms of place, equipment, and access to journal databases.

Responses

HITAP's workload has increased rapidly. The expanding organization from the increased workload has resulted in a lack of personnel. HITAP is aware of the issue and has attempted to solve the problem by recruiting more personnel to be able to deal with increasing workloads. At the same time, HITAP have been adjusting the management and working systems of the organization in order to increase working efficiencies. In addition, HITAP shall provide or establish research support teams specifically to reduce the workload of researchers and research assistants. However, it is still insufficient and the problem is still in need of a better solution. In addition, the limited space of the work place has been discussed with the advisory committee and shall be included in the action plan to be implemented in the future.

Due to the rapidly expanding organization, there are new personnel who are not fully cognizant of the work support systems, such as the supply of computer peripherals and large academic databases that can be accessed free of charge. New personnel misunderstand by assuming that those resources are limited. Therefore, HITAP plans to improve the orientation

for new staff and ensure that a complete work manual is always at hand.

Strategy III: Assess health technologies and policies in regard to public priority

4

Recommendations

HITAP should develop plans to make use of feedback from its users concerning the usefulness and the timeliness of its researches.

Responses

HITAP realizes the importance of feedback from those who make use of our research. Analyzing this feedback will help improve the validity or highlight the weak points of the research and organization itself. In the past, the process was neither systematic nor continuous. Therefore, HITAP plans to develop a feedback cognitive process in an official manner and have the feedback assessed by externally-sourced expert teams for the sake of transparency. The assessment results shall be used to facilitate the ongoing development of HITAP.

Strategy IV: Research dissemination to policy makers, medical practitioners, and the general public

5

Recommendations
HITAP should increase the participation of external experts in all processes of HITAP for transparency and inspection purposes.
Responses
In conducting researches, HITAP has employed transparency and participatory principles and adopted these principles in its HTA guidelines. HITAP works together with external experts throughout the research process, from obtaining and prioritising research topics, and fine tuning research questions, to research results presentation. However, to make the process clear, transparent, and verifiable, HITAP includes the participation of external experts in the HITAP research process guidelines which shall be used for HITAP research in the future.

6

Recommendations
HITAP should have specific strategies to disseminate research findings to different target groups, and should position itself as an academic institution and communicate research findings without bias.
Responses
HITAP shall consider appropriate communication channels used to disseminate academic findings to the target groups and shall place emphasis on working in a more systematic manner in the future.

HITAP has a clear role as a neutral academic institution which provides evidence-based recommendations for decision making. Its main responsibility is to disseminate academic findings and provide recommendations to policy makers, regardless of whether they comply with the recommendations or not. HITAP has no other roles than being an academic institution. HITAP has positioned itself as academic institute, not a policy advocating agency. Its role is to provide academic works to other organizations for their consideration.

Strategy V: Development of organizational management and encouragement of connections between academics and involved parties at both national and international HTA organizations

7

Recommendations

HITAP should be concerned about reduced organizational efficiency in its main responsibilities e.g. conducting research to support domestic decision making due to involvement/participation in academic activities or building up networks at the international level.

Responses

HITAP realizes that working with overseas organizations is very helpful in various aspects. However, HITAP receives its funding support from taxes paid by Thai people. HITAP serves as an important tool for decision makers and for solving national problems in accordance with the main responsibilities of HITAP. Participation in international activities requires careful consideration in each case in order to maintain a balance with internal projects.

Other recommendations

8

Recommendations
HITAP should be concerned about uncertainty which may affect the current sources of funding.
Responses
Although HITAP's research findings are very helpful to Thailand and have been widely accepted by all social sectors, this alone cannot guarantee HITAP's security, and this is a situation of which HITAP is well aware. Currently, HITAP receives its main funding support from the Thai Health Promotion Foundation. The uncertainty of some factors in Thailand may affect the sources of future funding. HITAP should also look for funding from other non-profit organizations to support the HTA activities which are HITAP's main missions.

9

Recommendation
HITAP should be concerned about its future role and position at the national and international levels.
Responses
HITAP is a program of a government agency and has a clear supporting role as an organization to provide information for making rational health resource allocation decisions. In addition, the Health Intervention and Technology Assessment Foundation (HITAF) also serves as a foundation which allows HITAP to benefit from more flexibility and adaptability in its works. If HITAP were restructured to be an independent organization or institution entirely under the government's supervision, it would be financed regularly, but the work flexibility would reduce and some resources would be spent on managing paperwork. Another option in the future is

that HITAP may cooperate with the Ministry of Public Health and request secondments in exchange for providing academic support to policy decision makings. Such an agreement would be in the form of a partnership for a period of 5 or 10 years. The funding support would be obtained from knowledge promotion offices such as the Health Systems Research Institute or the National Health Commission Office of Thailand. Then, the research findings from HITAP could be utilized for further development.

HITAP's participation in international activities is to enhance the strengthening of the organization and personnel as well as to develop their ability and work experience at the international level.

Chapter 3

Comments on Evaluation of HITAP

Chapter 3

Comments on Evaluation of HITAP

HITAP invited comments from two health economists concerning the methodology and key findings of the evaluation, as well as HITAP's responses to key recommendations. These experts include **Dr. David Hailey**, an Australian health economics and **Ruth Lopert** from George Washington University, in USA.

Dr. David Hailey

Institute of Health Economics and University of Queensland, Australia

Comments on the Evaluation of the Health Intervention and Technology Assessment Program report

The evaluation report notes the substantial achievements of HITAP since the previous evaluation and makes many useful suggestions that are worthy of consideration. In some areas further detail would have been helpful and might in part be obtained through the appendix to the report. A few of the suggestions carry significant resource implications, an aspect that is not really addressed.

Strategy 1

A helpful overview is provided of four methodological projects that fall under 'R & D of a fundamental system for HTA'

1. The rapid review referred to here would be a useful resource for HITAP.

2. The first three suggestions relate to collection of data on visitors to the website. These are not unreasonable but HITAP might wish to consider what these additional data would be used for. The second, suggesting targeting specific types of user, might be the most helpful. Comments on the data base are positive, with no specific suggestions on need for improvement,.

3. Some worthwhile methodological points are made regarding development of EQ-5D-5L

4. WTP per QALY The second point asks what is the purpose of the project. Certainly it is important to define this, though this is something that might have been addressed during the evaluation interviews. Other suggestions are useful and should help to define direction of the project and eventual use of the results.

5. Useful suggestions are made here. On point four (local or national costs) costs used will depend on the scope of the question being addressed; national costs may be more easily available.

6. There is a suggestion that HITAP consider capturing the impact of its research findings. This seems reasonable, but is not developed, nor are possible resource implications considered.

An explicit topic selection/ prioritization process is recommended for key methods. A UK process is suggested but other approaches may need to be considered.

Strategy 2

The reviewer's comments are based on a survey of HITAP research staff plus a focus group. A number of useful points emerged, though a possible danger is that surveys of this sort can produce a staff wish list which in some respects may not be realistic.

In the section on current human capital it is stated that HITAP has been able to maintain most of their research staff but have failed to recruit new researchers with intensive research experience. The intensive research experience that might be expected or sought in a new recruit is not specified. Relevance of research experience to HITAP requirements might have been clearer

Of more concern is the statement that most of the newly recruited researchers are "still young and inexperienced, and thus cannot provide a much needed immediate impact on HITAP research productivity." While expertise in HTA will of course grow over some time, general experience in other agencies is that a young researcher with aptitude will make a useful contribution to HTA activities, and other areas of research, in a matter of months. The statement also seems inconsistent with the final paragraph in this section which says that HITAP has given opportunities to young research staff by encouraging them to play roles such as being a team leader and advisor of a project. That would suggest substantial contributions from these staff.

Limited access of junior staff to mentors is noted as a drawback, but given the other responsibilities of mentors this is probably inevitable. Those junior staff with good aptitude will live with this situation; over - mentoring could also present difficulties, of a different sort.

There are then a series of reported concerns about insufficient research staff, heavy non - research workload, and limited working space. These might need review but at face value seem similar to the views of staff in almost any HTA or health research organization The suggestion that more administrative staff might be needed is also familiar territory for HTA groups, and may well be valid, though resource implications are not considered. Need for additional statistical expertise might also be reviewed. Additional statistical expertise would not necessarily have to be provided in house.

Strategy 3

The reviewer notes HITAP's impressive track record and includes statistics on numbers of projects. The importance of peer - reviewed publications in developing skills and careers is mentioned and numbers of journal publications included. This seems reasonable but the reports on which journal articles are based will probably also be peer reviewed, will contribute to HITAP's standing and will be often be the first step in disseminating findings to clients. There are also issues of delays in publication of journal material (referred to in the previous evaluation of HITAP) and of time and resources needed to produce journal articles.

Comments on the balancing act for different activities are well made, and reflect a very typical situation with HTA agencies. The call for a clearer publication strategy seems reasonable; perhaps more guidance on this point would have been desirable.

Strategy 4

Good information and feedback is provided in this area with substantial achievements of HITAP noted. Further detail on the topic selection process might have been helpful. I could not fully follow the detail of the example presented at the bottom of page 21. Good information is provided by the reviewer of HITAP's success with outputs and of increasing its visibility. It is less clear who the key decision makers were in some of the research activities and to what extent these key players were engaged and influenced.

Strategy 5

The reviewer clearly outlines the strong record of HITAP in this area. The recommendations focus on undertaking joint projects with other organizations, mentioned also in the conclusions. There are certainly attractions in that direction and such projects can be most rewarding. However, collaboration is not a resource - free process. Resource implications for pursuing such activities would need to be considered.

Discussion

The opportunities listed for HITAP seem reasonable, though it is not clear how research on health promotion came to be included as an example; this does not seem to have been raised earlier in the report.

The concluding recommendation on development of a set of key performance indicators is also reasonable, thought more detailed suggestions related to this would have been helpful.

Comments on

HITAP's responses to key recommendations

Strategy 1

In the first summary of recommendation, I suggest making it clear that the research topics refer to methods research, following the evaluator's commentary on four methodological projects.

The HITAP response summarises the history of the development of HTA methodologies. The proposal to hold meetings to determine priorities of research topics provides a response to the recommendation. I was unsure what is intended by "awareness of increases in demand" (p28, line 10). Perhaps this could be clarified.

The response to the second recommendation appropriately addresses the evaluator's suggestion on the need to consider ways for capturing the impact of HITAP's methodological products.

Strategy 2

The response acknowledges difficulties that HITAP has faced due to increased workload and organisation and training of staff. The direction of proposed action seems appropriate. Some quite specific details are included and there appears to be a commitment to provide additional resources. Consideration might be given to discussing training issues in more general terms.

Strategy 3

The response to the stated recommendation is clear and appropriate. The evaluator's recommendation regarding a publication strategy has not been addressed.

Strategy 4

The response to the first recommendation seems appropriate as far as use of external experts is concerned; HITAP is indicating that it is already doing this throughout its research process. However, the evaluator also made reference to involvement of stakeholders and policy makers. Perhaps reference could be made to this further involvement of external persons.

The response to the second recommendation is firm and appropriate.

Strategy 5

The recommendation here does not seem to me to reflect the evaluator's comments which were supportive of HITAP's efforts. The only suggestion regarding domestic activities was about continuing to undertake joint projects. The response is well – worded but seems to be framed for a different recommendation. Perhaps this material might be checked.

Other recommendations

1. A very reasonable response on funding. The last sentence starts "HITAP should also look for funding…." . Perhaps it should be clearer on whether this is a firm intention or if it is an approach that will be considered.

2. The response on future role and position seems reasonable on a general point made in the evaluation.

Nothing is said regarding the evaluation's concluding recommendation regarding development of a set of Key Performance Indicators. This is something that might well come up again in future reviews.

Ruth Lopert, BSc BMed MMedSc FAFPHM

Visiting Professor, Department of Health Policy

George Washington University

Comments on the Evaluation of the Health Intervention and Technology Assessment

Program report

1. In 2011, as part of its on-going evaluation strategy HITAP has initiated a second external evaluation process, beginning with an assessment of its core strategies by a team of UK, Thai and Korean assessors. This paper provides some comments on the draft evaluation report prepared by Jeonghoon Ahn and colleagues entitled '*Evaluation of HITAP – 2011'.*[1]

2. The draft external evaluation report appears to be thorough and considered, and focused on HITAP's five core strategies. It appropriately highlights the productivity of the agency over the preceding two years. The comments are balanced and pragmatic, although in parts of the report specific recommendations are not always set out clearly in the text and would benefit from clearer delineation. That said, this commentary is based on a late draft of the report and not the final version.

Methods and Process

3. The external evaluation report draws on data analyses, focus groups, surveys and interviews, as well as discussions with the evaluators, leadership and staff of HITAP and members of its Advisory Group, conducted in November 2011. However it is not clear whether the evaluation team also sought the opinions of policy makers and external stakeholders. These would seem to be highly relevant perspectives to capture in a review of this kind, and essential to ensuring on-going broad-based support for the agency's continued funding and remit.

4. An overview of HITAP's structure and resources, and particularly the disposition and deployment of its research staff would perhaps have been a useful inclusion, particularly in providing context for the discussion about capacity and capacity building.

5. The report is appropriately structured around HITAP's 5 core strategies, namely

    I: Research and development of a fundamental system for HTA

    II: Capacity strengthening for HTA at both individual and organizational levels as well as

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1   The final version of the report was not sighted by this reviewer.

for the Thai health system

III: Assess(ing) health technologies and policies with regard to public policy

IV: Research dissemination to policy makers, medical practitioners, and general public

V: Development of organizational management and encouragement of connections between academics and interested parties in both national and international HTA organizations

Findings

6. With respect to Strategy I, the comments address the 4 core methodological projects identified to inform the way the agency evaluates and interprets evidence. These are:

   a) Improving and updating the National Thai database of HTA

   b) Developing tools and utility/quality of life measures (EQ-5D-5L) for use in Thailand

   c) Surveying the Thai society's willingness to pay per QALY for informing an appropriate decision-making threshold in Thailand

   d) Compiling standard cost lists for both healthcare and non-health care costs to be applied in HTA

7. With respect to a) the report notes that the database is an excellent resource of highly relevant information but identifies a number of ways in which both the evaluative effort and the database itself could be improved in the future and which should in turn increase the number of users and its impact on health policy and practice.

8. Regarding b) the report comments that developing a Thai version of the 5-level EQ-5D is a worthwhile endeavour and identifies some specific questions to be addressed in doing so. It raises questions regarding the extent to which the existing EQ-5D tool is being used and how well integrated it is within the Thai decision-making context. The report does not comment on HITAP's selection of EQ-5D as its apparently preferred MAUI, although this may have been addressed in previous reports. Moreover, the extent to which preference weights for EQ-5D been elicited within the Thai population is unclear, as there has been little published to date.[2]

9. Concerning c), determining willingness to pay per QALY to establish a cost effectiveness threshold, the report notes that the research is still at the design stage. An important recommendation, endorsed here, is to clarify the purpose of the project - whether it is intended primarily for research and capacity building among HITAP researchers or

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2   Phantipa Sakthong P, Charoenvisuthiwongs R, Shabunthom R. A comparison of EQ-5D index scores using the UK, US, and Japan preference weights in a Thai sample with type 2 diabetes. *Health and Quality of Life Outcomes* 2008;6:71

whether there is a more specific objective to inform resource allocation decisions through influencing the total health budget or the imposition of a cost effectiveness threshold. The report further recommends that in addition to WTP studies HITAP should also consider empirical evidence of real world substitution/ adoption/ disinvestment decisions, to ensure any derived threshold is not inconsistent with the health budget, as absent direct influence over appropriations, relying solely on WTP studies could give rise to thresholds not congruent with actual capacity to pay. It is essential to consider, before the study is completed, how, for example, the finding of a very high WTP compared to the country's per capita GDP would be handled and how it would be reconciled with more theoretic benchmarks[3].

10.   Regarding d) the development of a list of standard costs, the report appropriately stresses the identification and cataloguing of unit costs as a necessary requirement for carrying out HTA aimed at informing decision makers, but that this cannot be a "one-off" exercise. To that end, it is recommended that a schedule for reviewing and updating the list be established at the outset.

11.   The report makes a number of recommendations with respect to methods research, including continuing to publish and publicise its methods research and finding ways to assess "the impact of methods research findings on its own methods and processes as well as on the way HTA research is understood and used by other Thai stakeholders". The on-going dissemination of HITAP's work in this area is an important avenue of both engagement and influence. A key recommendation is that HITAP develop a more explicit topic selection/prioritisation process for its methods research. Given the commonality of methodological challenges faced by HTA agencies and the limited resources available within HITAP for research of this type, it is important that any methods priority setting process also take into account where possible work being undertaken by other agencies, and seek to complement rather than compete, so that the benefits of the research effort are maximised on a global basis.

12.   Strategy II concerns internal and external capacity building in HTA, individual and collective, as well as internal and external. The report focuses on the evaluation of the internal capacity building activities, ie those aimed at improving the capacity of HITAP's staff. It notes significant growth in the capacity of HITAP research staff both quantitatively

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3   The World Bank has stated that a health care intervention may be considered highly cost effective if it buys a year of healthy life for the equivalent of per capita GDP.

and qualitatively, but also that the majority of newly recruited researchers are inexperienced, and thus unable to immediately impact HITAP's research productivity. The report makes a number of pragmatic recommendations to improve the productivity of the researchers through reducing administrative workloads, including giving consideration to the setting up of a secretarial unit to carry out non-research tasks thus allowing researchers to focus more on their research. They also note that more administrative staff, especially ones fluent in English, might also be needed to help HITAP operate more effectively. The freeing up of research staff from non-research related administrative activities is to be encouraged as, in addition to being a more efficient way of deploying resources and improving the productivity of research staff, it is likely to enhance job satisfaction and contribute to their retention.

13. While noting that with respect to Strategy II HITAP has generally performed well, the report also observes that it appears to have persistent skill shortages in certain key areas (eg biostatisticians and supporting staff with good command of English) and recommends the development of a specific strategic staff recruitment and retention scheme. This is an important recommendation and is a necessary response to a challenge arguably facing every HTA agency, to ensure the right balance of disciplines and skills. Effective and experienced HTA researchers take time to develop and the importance of planned and strategic recruitment together with targeted staff development and retention strategies cannot be overestimated.

14. Under Strategy III the evaluation report notes that this is arguably HITAP's core activity - undertaking HTA to address the needs of Thai policy makers. This highlights the importance of garnering the perspectives of policy makers' in evaluating HITAPS' performance. It is recommended that this be a priority in any subsequent evaluation process.

15. The effectiveness of HITAP with respect to Strategy III was assessed from descriptions of projects both completed and in progress; the outputs of these projects; and HITAP's publication record. Observing an emphasis on the production of information, the report notes that HITAP has an impressive track record of delivering HTA for policy makers. The report also notes that the large number of publications in peer-reviewed journals, which, besides confirming the quality of the work, is also important to recruitment, skill development and retention of high quality researchers, to contribute external quality control, and in raising both the domestic and international profiles of HITAP.

16. Observing a degree of tension between generating and disseminating evidence; between working internally with policy makers and externally with domestic and international HTA entities; and between undertaking additional studies and developing materials for publication based on existing studies - as all of these activities compete for resources from a limited pool – the report appropriately recommends having a clear strategy for dealing with competing demands for limited resources. It goes on to suggest that a clearer publication strategy would be useful in informing decisions on the disposition of staff time between publication activity and other activities. This is a helpful recommendation.

17. Strategy IV - research dissemination to policy makers, medical practitioners, and the general public – has been addressed in part through the establishment of a specific functional team (knowledge translation/information technology) and efforts directed at

    1. encouraging stakeholders' participation in prioritizing and selecting research topics
    2. allowing policy makers and stakeholders to be involved in research topic selection, and reviewing research results for policy recommendations
    3. presenting research results to particular stakeholders through appropriate communication channels, for example, translating research knowledge into policy decisions via policy formulations
    4. keeping the structure and content of websites updated

18. The report notes that the adoption of a topic selection and prioritization process as a standard practice in policy formulation by the Benefit Package Subcommittee under the National Health Security Board has been a major HITAP contribution to policy formulation in health care financing. The view that future expansion to other policy bodies in this respect would not only contribute to evidence-based policy decisions but also ensure long term sustainability of HITAP as an HTA agency is strongly endorsed.

19. Strategy V involves collaboration and networking with academics and interested parties in both national and international HTA organizations. The report notes HITAP's impressive HTA networking activities to date, particularly its international collaborations and educational activities in Thailand, but notes some inconsistency in HPRN's capacity to maintain domestic joint projects. It appropriately recommends strengthening networking activities through annual conferences and staff exchanges with other HTA agencies within HTAsiaLink, as well as continued efforts towards publishing specific HTA results internationally.

Concluding Comments on the External Evaluation Report

20.   The report notes that HITAP has continued to build on the success of its first two years and that its record provides a solid foundation for its future success. However it also notes that changes in the Thai decision-making context have created a degree of uncertainty over the future role and funding of the agency. The report suggests HITAP seek to broaden its funding base and build more alliances with groups interested in generating and using HTA evidence throughout Thailand. While it is reasonable for the agency to seek to augment its funding, caution must applied in ensuring that broadening the funding base does not create further uncertainty over the agency's role and strategic priorities.

21.   The report also recommends the development of a set of Key Performance Indicators (KPIs) with respect to each core strategy, noting that while KPIs will capture only some aspects of HITAP performance, they will nonetheless help to streamline the data collection for the periodic review of HITAP activities, and provide an indication of the extent to which HITAP is "on track".   However, the limitations of KPIs must be recognised; they must be carefully selected so as not to bias any evaluation towards those activities most readily measurable but not necessarily reflective of the more strategic and informative indicators of performance.

22.   Most importantly the report notes a lack of clarity surrounding HITAP's overall strategic direction, and that this may reflect a lack of consensus on the most appropriate long term role for the agency. The report rightly suggests that there needs to be a clearer articulation of the direction in which HITAP should be heading. Without this, the organisation to some extent at least risks diluting its impact through uncertainty over its role, direction and priorities. The development and publication of a medium term strategic plan at the conclusion of the cyclic evaluation process should be considered.

23.   Finally, the report offers no comment on the frequency or mode of the evaluation process, which clearly involves considerable effort. It is of some concern that undertaking this every two years could engender a degree of "evaluation fatigue" in the organisation. While the introduction and use of KPIs for each of the strategies may go some way to reducing the overhead of the evaluation process, it is recommended that consideration be given to reducing the frequency of reviews and adopting a triennial or even 4-yearly evaluation cycle.

Comments on HITAP's responses to Key Recommendations

Strategy 1

Recommendation 1

There is a need for a research topic selection process in Strategy 1**.** HITAP ought to improve the process by which it identifies the key methods used to prioritize research topics through an explicit topic selection/prioritization process.

Summary of HITAP Response

To facilitate awareness of increases in demand, HITAP will, in the future, hold meetings to determine the priority of research topics for Strategy 1, and determine a reasonable period of time to update existing instruments and databases.

Comment

A more detailed articulation of the anticipated process would be helpful in order to determine how well it addresses the identified requirement

Recommendation 2

The results and findings obtained from the research and development in Strategy 1 are highly important, for example, as research instruments, guidelines, and databases for health technology assessment. HITAP should have a means of ensuring that those outputs are properly utilized.

Summary of HITAP Response

HITAP plans to develop a monitoring and registration system for instrument/research utilization in order to learn the results and instruments developed by HITAP, and to conduct survey studies to assess the satisfaction with, limitations of, and recommendations for use. This process will be included in HITAP's proposal in the next phase.

Comment

This is a pragmatic approach.

Strategy 2

Recommendation 3

HITAP should develop solutions to resolve human resources shortages at all levels, and ensure appropriate infrastructural support is provided for recruited staff.

Summary of HITAP Response

HITAP's increased workload has led to personnel shortages, and HITAP is attempting to recruit additional personnel while at the same time adjusting its internal processes to increase working efficiency. In addition, HITAP intends to establish administrative support teams to reduce the workload of researchers and research assistants. Overall however there remains a problem that is partly one of limited physical space, and this will be addressed in a future action plan. HITAP plans to improve the orientation of new staff and ensure that a comprehensive work manual is available at hand.

Comment

There is considerable value in ensuring adequate administrative support is available to free research staff from administrative duties that reduce efficiency and undermine job satisfaction. Recruitment alone is insufficient to respond to personnel shortages; efforts to ensure retention of staff are critical too.

Strategy 3

Recommendation 4

HITAP should develop plans to make use of feedback from its users concerning the usefulness and timeliness of its research output.

Summary of HITAP Response

HITAP plans to develop a feedback process and have the feedback transparently assessed by external experts. The assessment results shall be used to facilitate the on-going development of HITAP.

Comment

This could be folded into the cyclic evaluation process as it is a valuable indicator of HITAP's relevance and performance.

Strategy 4

Recommendation 5

HITAP should increase the participation of external experts in all processes of HITAP for transparency and inspection purposes.

Summary of HITAP Response

While HITAP works together with external experts throughout the research process, from obtaining and prioritising research topics, and fine tuning research questions, to the presentation of results, to make the process clear, transparent, and verifiable, HITAP will

include the participation of external experts in the HITAP research process guidelines to be used for HITAP research in the future.

Comment

The broader participation of external experts is to be encouraged, subject to appropriate safeguards to avoid any perceptions of conflict of interest.

Recommendation 6

HITAP should have specific strategies to disseminate research findings to different target groups, and should position itself as an academic institution and communicate research findings without bias.

Summary of HITAP Response

HITAP will consider appropriate communication channels to disseminate its findings to target groups and will place some emphasis on working in a more systematic manner in the future.

HITAP has a clear role as a neutral academic institution that provides evidence-based recommendations for decision-making. Its main responsibility is to disseminate academic findings and provide recommendations to policy-makers, regardless of whether they comply with the recommendations or not.

Comment

This is very clear and unambiguous.

Strategy 5

Recommendation 7

HITAP should be concerned about reduced organizational efficiency in its main responsibilities eg conducting research to support domestic decision-making due to involvement/participation in academic activities or building up networks at the international level.

Summary of HITAP Response

While HITAP recognizes the value of international engagement, it is funded by the Thai taxpayer, and its main responsibilities lie in addressing national problems. Participation in

international activities therefore requires careful consideration in each case to maintain a balance with internal projects.

Comment

Striking a balance between international and domestic engagement is an on-going challenge for any organization of this type. However engagement with and participation in international organizations and staff exchanges with other agencies are important for skill development and the maintenance of methodological currency, as well as enhancing the profile of the agency which is important in recruiting and retaining staff.

Additional recommendations

Recommendation 8

HITAP should be concerned about uncertainty that may affect current sources of funding.

Summary of HITAP Response

Although HITAP's research findings are widely accepted, this does not guarantee funding. Currently, HITAP receives its main funding support from the Thai Health Promotion Foundation. It should seek funding from other non-profit organizations for the activities that reflect its main mission.

Recommendation 9

HITAP should be concerned about its future role and position at the national and international levels.

Summary of HITAP Response

HITAP is a program of a government agency and has a clear supporting role as an organization to provide information for making rational health resource allocation decisions. If HITAP were restructured to be an independent organization or institution entirely under the government's supervision, it would be financed more securely, but its flexibility would be reduced and there would be administrative overheads.

Comments

Diversifying sources of funding should be undertaken with caution to ensure that broadening the funding base does not lead to pressure to vary organizational priorities and create further uncertainty over the agency's role and strategic interests.