



## ANNUAL REPORT 2011

Health Intervention and Technology  
Assessment Program (HITAP)



### HEALTH TECHNOLOGY ASSESSMENT (HTA)

Health Technology Assessment (HTA) means the systematic assessment of the positive and negative impacts that occur from using health-related technology or policies, either in the present or in the future, and may include impacts on health, economy, society, and morale. The assessments are conducted with the objective of obtaining supporting data for consideration in determining national policy or for organizational management, including for use as guidelines in providing health services or improving personal health behavior.

### ABOUT HITAP

The Health Intervention and Technology Assessment Program or HITAP was established in 2007 as a non-profit research organization which reports to the Bureau of Policy and Strategy of Thailand's Ministry of Public Health. HITAP's main responsibility is to assess a range of health interventions and technologies, including pharmaceuticals, medical devices, clinical practices, individual and community health promotions and disease prevention, as well as social health policy. HITAP receives its main funding support from 4 public institutions including Thai Health Promotion Foundation, Health Systems Research Institute, National Health Security Office, etc. HITAP also receives specific funding from non-profit organizations to assess health intervention and technology in accordance with the main responsibilities of HITAP.

#### Vision

Appropriate health interventions and technologies for Thai Society

#### Mission

- To efficiently and transparently appraise health interventions and technologies by using international standard and qualified research methodologies;
- To develop systems and mechanisms in order to promote the optimal selection, procurement and management of health technology as well as appropriate health policy determination;
- To distribute research findings and educate the public in order to make the best use of health interventions and technology assessment results.

### Chair of Steering Committee



"HITAP was established just 5 years ago, but it already has many widely accepted work based on the ability of its leaders and the management methods that induce active young staff to be involved in research work. HITAP has produced its international quality work by using a management mechanism to upgrade the work quality and working model." **Prof. Vicharn Panich**

### Program Leader



"HITAP is now 5 years old and can be likened to an energetic teenager who enjoys a challenge but sometimes lacks experience and still needs to learn. It is fortunate that HITAP has friends, relatives and seniors who cooperate well and kindly teach us, and I sincerely hope that we continue to receive their kind assistance and hope for the opportunity to perform more important work for Thai and international societies as we have done in 2011." **Dr. Yoï Teerawattananon**



### HIGHLIGHT RESEARCH PROJECTS AND ACTIVITIES IN 2011

#### Research projects in Thailand

- Research for the development of a health benefit package under the universal coverage scheme.**

There was concern over the previous decision process to include a new intervention in the health benefit package as it was unsystematic and had limited participation from stakeholders. Health benefits at present do not sufficiently cover some necessary health interventions. Therefore, the Subcommittee for the Development of the Benefit Package and Service Delivery of the National Health Security Office assigned HITAP and another research institute - the International Health Policy Program (IHPP) - to systematically and transparently run a research project to develop the health benefit package based on technical principles and comments from stakeholders in the health system, i.e., representatives of policy decision makers, health professionals, academics, patients, civil societies, industry, and the general population.

- A feasibility study of allogeneic hematopoietic stem cell transplantation for severe thalassemic patients covered by the universal coverage scheme.** The important finding from the previous study was that the hematopoietic stem cell transplantation was more cost-effective than blood transfusion combined with iron chelating therapy, especially in cases where the donor of the stem cells was a sibling of the patient. According to the limited numbers of health care providers, this recent study assesses current and future capacities of the supply side, and applies medical criteria for selecting/prioritizing the patients for this service.



- Economic evaluation of selective health promotion programs under the Thai Health Promotion Foundation (ThaiHealth).** This study consisted of 2 sub-studies, the first of which was the development of guidelines to determine the goals and indicators of the ThaiHealth whereby the results of the study revealed that if it was possible to prevent a case of 1 new smoker and 1 new drinker, the country would reduce its economic loss (from premature deaths, absence from work, etc.) by an amount equal to THB 85,000-158,000 and THB 19,000-280,000 respectively. The second study was an assessment of the willingness-to-pay of a household to assess the value of health promotion programs in terms of monetary units under 6 plans, i.e., Alcohol Consumption Control; Tobacco Consumption Control; Traffic Injuries and Disaster Prevention; Physical Activity and Sport for Health; Health Risk Factor Control (Nutrition); and Social Marketing. The results found that most of the population valued the health promotion plans of the ThaiHealth to continue its work such that the total value of the willingness-to-pay was higher than the cost of the plans by ThaiHealth.

- Impact of obesity on economics and quality of life in Thailand.** This study was conducted to assess the economic cost incurred from obesity in Thailand in 2009. The results of this study found that the economic loss incurred from obesity was valued at approximately THB 12 billion, divided into cost of health expenses (THB 5.5 billion), cost of loss from premature death (THB 5.8 billion), and cost of loss from absence from work due to sickness (THB 700 million). In this regard, it was also found that overweight people also had a lower quality of life comparing to others and also had problems related to mobility and sickness at a level that was statistically significant compared with those of a normal weight.

- The evaluation of outcomes and determinants of cervical cancer screening program using pap smear and visual inspection with acetic acid in Thailand.** After the Ministry of Public Health introduced a policy to develop the quality and coverage of cervical cancer screening services, HITAP studied several factors impacting service accessibility in target groups (i.e., females between 30-60 years old), as it was found that between 2008-2009, 68% of the target group attended the screening service, which was significantly increased from preceding years. In this regard, there were several factors that promoted service accessibility, i.e., announcements in the media, the spread of information about the disease and screening, and the solicitation of family members. In addition, factors inhibiting service accessibility were also found, such as negative attitude towards screening, smoking, beliefs and social values, and etc.



- Cost-utility analysis of 7-, 10-, and 13- valent pneumococcal conjugate vaccine in Thailand.** The objective of this study was to assess the cost and outcome of the pneumococcal conjugated vaccination, which is a vaccine used to prevent septicemia, pneumonia, meningitis, and etc. The assessment was conducted by using the vaccine in children under the age of 2 years old who were not classified as being in the high-risk group as well as in children aged at least 2 years old but not exceeding 5 years old in high-risk groups (i.e. HIV infected child, child with no spleens since birth, etc.). The results were calculated by using an economic model and then compared with the findings from unvaccinated cases. The primary result of the study showed that the present vaccine price (approx. 1,400-1,900 baht/1 unit) was not cost-effective in the context of Thailand.



- Collaborative research project to determine willingness-to-pay per quality-adjusted life year across 3 countries in Asia: WTP/QALY in Asia.** The economic value is one important factor influencing the health care resource allocation decisions. In this regard, determining a value for a QALY in the context of a country was necessary for such decision making. In 2008, HITAP surveyed 1,191 Thais from 9 provinces to determine the willingness-to-pay per healthy year (QALY) to be used as a threshold for health care decision making. Such a study, however, had several restrictions, such as the health condition used for assessment, ceiling effect, and representativeness of the sample group. This ongoing project is one of a number of projects conducted under the newly-established collaboration "HTAsiaLink". The aims of this new research project is to determine a value of a QALY among the following 3 countries in Asia; Japan, South Korea, and Thailand.

- Systematic review of economic evaluations on preparedness and interventions against influenza pandemics.** This project was commissioned and supported by the WHO with the aim of assessing the results from economic evaluations of preparedness strategies and interventions to control and prevent influenza pandemics. The authors of this comprehensive systematic review analyzed a large number of relevant bibliographic databases and search engines in order to compile empirical evidence, which was later synthesized to facilitate its translation in decision-making. The findings are expected to be used to provide updated information for the WHO

pandemic preparedness and response guidance and other international policy makers interested in allocating resources for future influenza pandemics.

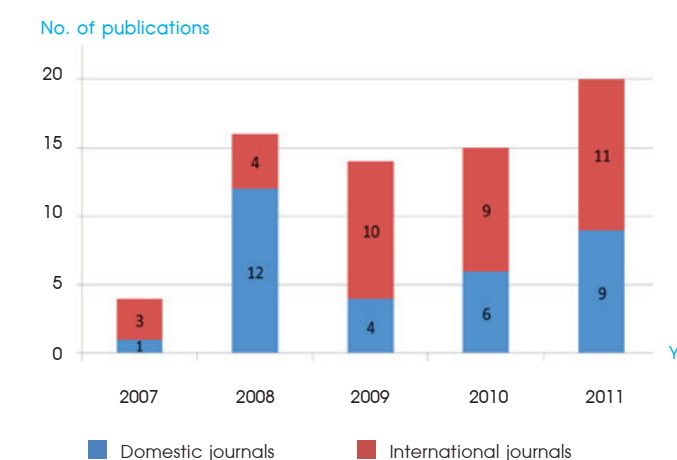
- Using a capability index to determine the value for money of the AIDS Competence Process in Thailand.** This project is to develop a methodological framework for assessing the cost-effectiveness of the AIDS Competence Process (ACP) and applying it retrospectively for implementation in Thailand. ACP by the Constellation is a community-driven approach to respond to the HIV/AIDS challenge by the people themselves by applying their own

solutions through their resources. This project employed literature reviews and interviews with stakeholders in order to develop a suitable concept of assessing the value for money of social complex interventions. A questionnaire using capability index to determine the value for money was developed and tested in Chiang Mai. The results of the test revealed that this developed framework is feasible and practical. Comparing costs and outcomes of the ACP using various scenarios, it is found that the ACP is likely to be very cost-effective in Thailand. It not only reduces AIDS infection in high-risk groups but also enhances the quality of life of people in the community.

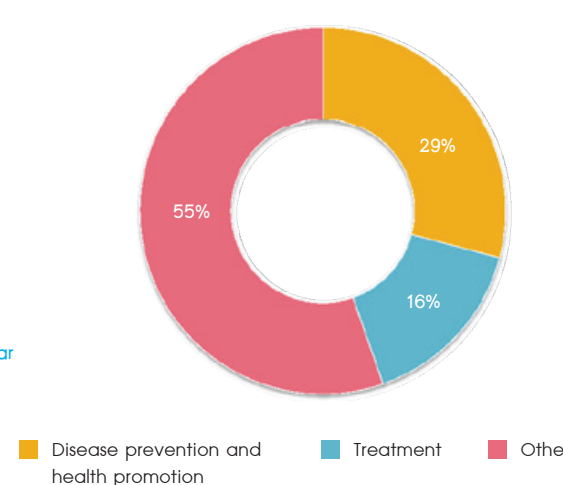
### EXAMPLE OF RESEARCH DISSEMINATION IN 2011

Research projects	Policy decision making fora	Academic conferences		Publication in academic journals		Mass media
		Oral presentations	Poster presentations	International journals	Domestic journals	
Economic evaluation of drug treatments in patients with Chronic Hepatitis B (CHB)	X					
Development of an optimal policy strategy for prevention and control of cervical cancer in Thailand	X	X	X	X		X
Economic evaluation of absorbent products for urinary and fecal incontinence among disabled and elderly people in Thailand	X					
Cost-Utility analysis of hematopoietic stem cell transplantation for severe thalassemic patients	X			X		
Formulating policy recommendations to alleviate health problems among people living around industrial areas in Thailand: a case study of leukemia	X			X		
Assessing the impact of health promotion interventions using social marketing strategies among construction and factory workers		X			X	
Economic evaluation on screening strategies and treatment options for postmenopausal osteoporosis	X			X		
Pursuing evidence-based policy in the health sector: The case of iodine supplementation for pregnant women in Thailand	X				X	

Publications in academic journals  
from 2007-2011



Research projects  
from 2007-2011







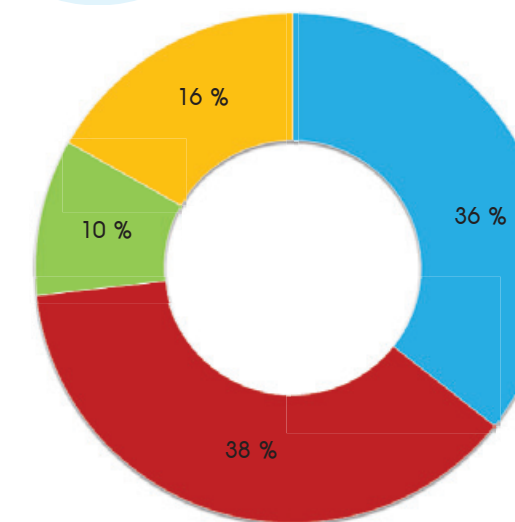
## HEALTH INTERVENTION AND TECHNOLOGY ASSESSMENT PROGRAM

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## FINANCIAL REPORT 2011

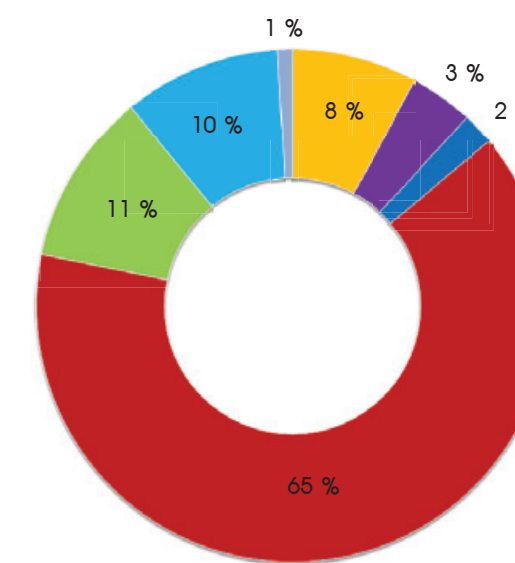
### Expenses



- Staff payment
- Research projects
- Research fund
- Capacity building and networking

Total: THB 33 million

### Incomes



- National Health Security Office (NHSO)
- World Health Organization (WHO)
- Department of Disease Control, Ministry of Public Health, Thailand
- Thai Health Promotion Foundation (ThaiHealth)
- Health Systems Research Institute (HSRI)
- Thai Health-Global Link Initiative Project (TGLIP)
- Others

Total: THB 37 million



## HIGHLIGHT ACTIVITIES IN 2011

- Research development activities
- Capacity building activities (Journal club)
- Other activities



**10 February 2011**  
Journal club on the topic of 'Tambon Health Promotion Hospital Policy' by Dr. Supakit Sirlak (Director, Bureau of Policy and Strategy, Ministry of Public Health).



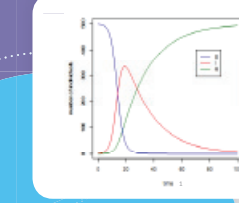
**21 March 2011**  
IHPP and HITAP researchers organized a topic selection meeting under the research project on the development of health benefit package under the universal coverage scheme. (1/2011)



**1 April 2011**  
The preliminary results of a study on 'The development of a system for monitoring the situation and impacts of teenage pregnancy in Thailand' were presented in the expert meeting.



**25 April 2011**  
The study on 'Economic evaluation of policy options for prevention and control of cervical cancer in Thailand' was presented in the Ministerial meeting.



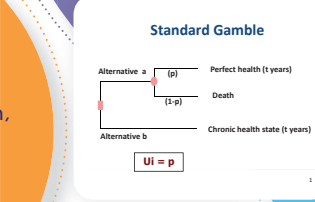
**26 May 2011**  
Journal club on the topic of 'Mathematic Model' by Dr. Aronag Cooper Meeyai (Faculty of Public Health, Mahidol University).



**4-6 July 2011**  
The training on 'Health economic evaluation, cost-effectiveness analysis, Pharmacoeconomics (EE-Training) 7' was held.



**5 August 2011**  
A research framework on 'Cost-effectiveness analysis of HLA-B\*1502 genotyping in carbamazepine or phenytoin induced Steven-Johnson syndrome and toxic epidermal necrolysis' was presented to the experts for recommendations to develop health benefit package under the universal coverage scheme.



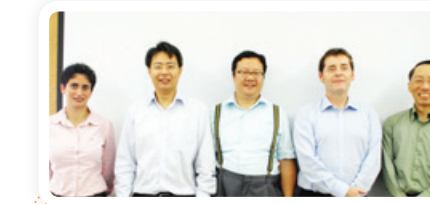
**23 July 2011**  
Journal club on the topic of 'Standard Gamble' by Ms. Kakanang Tosanguan (HITAP researcher).



**31 August 2011**  
The consultation meeting on 'Development of optimal policy strategy for prevention and control of Alzheimer patients' was held under the collaborative of the Alzheimer's Disease and Related Disorder Association (ARDA) and HITAP.



**10 November 2011**  
The academic seminar on 'Hot issues related to Health Technology Assessment (HTA) in United Kingdom, South Korea, and Thailand' was held.



**12 November 2011**  
The external reviewers from United Kingdom, South Korea, and Thailand presented the preliminary results on 'The Evaluation of The Technology and Policy Assessment Program for Health Resource Allocation'.

## 2010

January

February

March

April

May

June

July

August

September

October

November

December

## 2012

**25-26 January 2011**  
HITAP researchers joined 'The Asian Symposium on Value for a QALY', organized by National Evidence-based Healthcare Collaborating Agency (NECA), South Korea.



**18 March 2011**  
HITAP welcomed researchers from the Center for Community Empowerment and Health Policy Humanities Surabaya, National Institute for Health Research and Development (NIHRD), Indonesia.



**25 March 2011**  
Expert meeting on 'The development of health, promotion and disease prevention package for Thai children aged 0-5 years' was held for fine-tuning the research framework.



**7 April 2011**  
Meeting on 'Rational use of Health Technology: A collaborative program between the Consortium of Thai Medical Schools and HITAP'.



**11-12 May 2011**  
The internal training on 'Systematic Review' and 'Meta Analysis' was held.



**24 May 2011**  
The study on 'Evaluation of high-cost medicine scheme (Category E2) under the 2008 National List of Essential Medicines' was presented to the Subcommittee for development of the National of Essential Medicines.



**21 July 2011**  
The four research projects under the development of health benefit package under the universal coverage scheme were presented to the Subcommittee for Development of Benefit Package and Service Delivery.



**29 July 2011**  
Expert meeting on 'Cost-utility analysis of adjuvant therapy for stage III colon cancer in Thailand' was held to consider the project results.



**15-19 August 2011**  
The workshop on 'Economic evaluation and health communication campaigns for maternal and child health voucher scheme' was held for Myanmar health officers in the Union of Myanmar.



**14 September 2011**  
The study on 'The suggestion for research management in developing the emergency medical institute of Thailand' was presented.



**8 December 2011**  
Health system research topics prioritization of Thailand 2012.



**9 December 2011**  
IHPP and HITAP researchers organized a topic selection meeting under the research project on the development of health benefit package under the universal coverage scheme.

