

## Session: Asia Universal Health Coverage Utilizing health technology assessment (HTA) to support the Universal Health Coverage in Thailand

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## Disclaimer



 This presentation reflects the research experiences and opinions of the speaker and do not represent the views of speaker's organization.

# Outlines



- Policy decision problems related to UHC
- Evidence based decision making
- HTA definition
- Role of HTA in the development of health interventions benefit package for Universal Coverage Scheme in Thailand
- Challenges of utilizing HTA

## Policy decision problems related to UHC

• Rapid technological change puts pressure on healthcare systems to add new preventive, diagnostic, treatment and rehabilitative interventions (Policy decision problem)

of Pharmaceutical Associations

- Limited resources for the introduction of new technologies (Policy decision problem)
- HTA provides evidence-based input to the policy-making processes concerning the use of (new) technology in health services
- The link between HTA and policy-making is ensured when an HTA takes a specific policy question as a starting point.

### Evidence-based decision making



**Asia Partnership Conference** 

Ref: Teutsch SM, Berger ML: Evidence synthesis and evidence-based decision making: related but distinct processes. Medical decision making : an international journal of the Society for Medical Decision Making 2005, 25(5):487-489.

# Health Technology



An intervention developed to prevent, diagnose or treat medical conditions; promote health; provide rehabilitation; or organize healthcare delivery. The intervention can be a test, device, medicine, vaccine, procedure, program, or system.

## Health Technology Assessment (HTA)



"A multidisciplinary <u>process</u> that uses explicit methods to determine <u>the value</u> of a <u>health technology</u> at different points in its <u>lifecycle</u>. The purpose is to inform decision-making in order to promote an equitable, efficient, and highquality health system."

<u>Note 1</u>: A <u>health technology</u> is an intervention developed to prevent, diagnose or treat medical conditions; promote health; provide rehabilitation; or organize healthcare delivery. The intervention can be a test, device, medicine, vaccine, procedure, program, or system.

<u>Note 2</u>: The <u>process</u> is formal, systematic, and transparent, and uses state-of-the-art methods to consider the best available evidence.

<u>Note 3:</u> The <u>dimensions of value for a health technology</u> may be assessed by examining the intended and unintended consequences of using a health technology compared to existing alternatives. These dimensions often include clinical effectiveness, safety, costs and economic implications, ethical, social, cultural and legal issues, organizational and environmental aspects, as well as wider implications for the patient, relatives, caregivers, and the population. The overall value may vary depending on the perspective taken, the stakeholders involved, and the decision context.

<u>Note 4</u>: HTA can be applied at different points in the <u>lifecycle of a health technology</u>, that is, pre-market, during market approval, post-market, through to the disinvestment of a health technology.

Source: O'Rourke B, Oortwijn W, Schuller T: The new definition of health technology assessment: A milestone in international collaboration. International journal of technology assessment in health care 2020:1-4.



# Criteria for development non-medical reimbursement package

### Making decision

1. Cost-effectiveness and budget impact

2. Clinical practice guideline

3. Feasibility and preparedness of health services

4. Affordability of public health insurance

5. Social and ethical issues

6. Other consideration e.g. existing medical and non-medical reimbursement package

✓ Bone marrow transplantation: curative treatment for Gaucher Type I

# Criteria for development medical reimbursement package



### ✓ Imiglucerase before undergoing *Bone marrow transplantation*

### **Cost-effectiveness plane**





### **Cost-Effectiveness threshold and price negotiation**





### Use of HTA to inform coverage decisions in Thailand



- Value for money: Incremental cost-effectiveness ratio (ICER)
  - Cost-effectiveness threshold = 160,000 THB/QALY gained (~4,600 USD)
- Affordability:
  - Budget impact (current situation vs new intervention)
  - Price negotiation of high-cost medicines/health technologies
- $\circ$  Financial risk protection
- $\circ$  Social, Equity and Ethical implication
- Supporting information:
  - Feasibility study
  - Access to care

## Challenges of utilizing HTA



### Demands for HTA continue

- 1. Rising expenditures of health care
- 2. Rising trend of highly specialized health technologies
- 3. Implementation research for monitoring and evaluation in real-world setting



Required more supporting and updating information for policy decision making – EE & price negotiation, budget impact analysis, feasibility, social, equity and ethical issues, effective coverage, implementation research, etc.

### **Further reading**



journal homepage: http://www.elsevier.com/locate/zefq

#### SCHWERPUNKT

#### The use of economic evaluation for guiding the pharmaceutical reimbursement list in Thailand

Kosten-Nutzen-Bewertungen als Instrument zur Festlegung der Liste von zu erstattenden Arzneimitteln in Thailand

Yot Teerawattananon<sup>1</sup>, Nattha Tritasavit<sup>1,\*</sup>, Netnapis Suchonwanich<sup>2</sup>, Pritaporn Kingkaew<sup>1</sup>





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### Health Technology Assessment in Thailand: Institutionalization and Contribution to Healthcare Decision Making: Review of Literature

Pattara Leelahavarong, Suradech Doungthipsirikul, Suthasinee Kumluang, Akanittha Poonchai, Nitichen Kittiratchakool, Danai Chinnacom, Netnapis Suchonwanich and Sripen Tantivess

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SPECIAL REPORT

Using health technology assessment for informing coverage decisions in Thailand

Journal of Comparative Effectiveness Research

### **Efficiency or equity:** value judgments in coverage decisions in Thailand

Sripen Tantivess, Román Pérez Velasco, Jomkwan Yothasamut, Adun Mohara, Hatai Limprayoonyong and Yot Teerawattananon Health Intervention and Technology Assessment Program (HITAP), Department of Health, Ministry of Public Health, Nonthaburi, Thailand

Coverage decisions in Thailand

331

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