



The Thai
Pharmacoeconomics
guidelines & its
application in Thailand

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Thai Health Technology Assessment guidelines

- There have been two editions of the HTA guidelines used as the methodological references when conducting Health Technology Assessment (HTA) studies in Thailand



The 1st issue (2008)



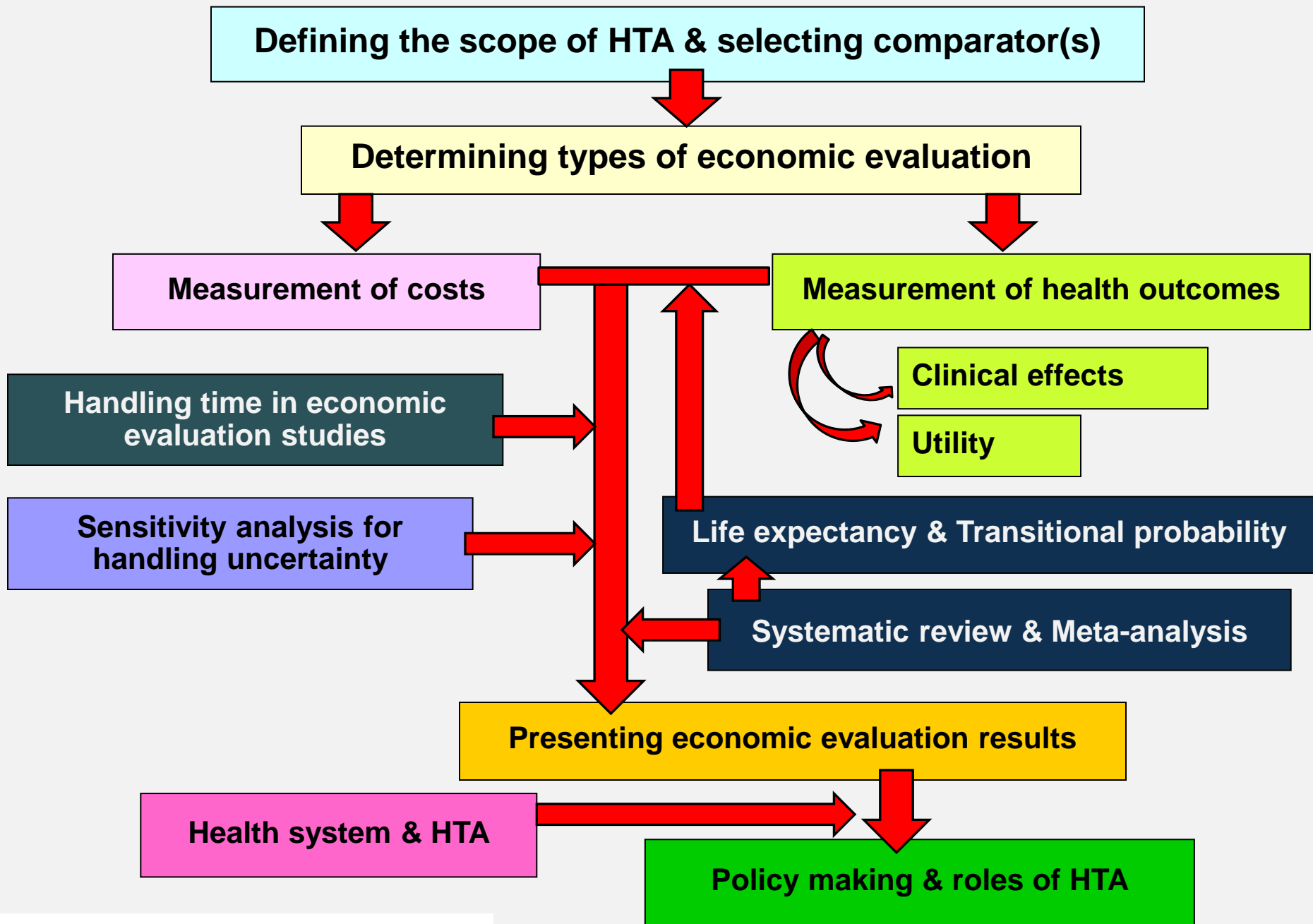
The 2nd issue (2013)

First edition of the Thai HTA guidelines



- The 1st issue was made practical suggestions for:
 - Improving the quality of health economic evaluation research
 - Giving recommendations on a set of key methodological issues from an economic standpoint

Greater transparency by improving the consistency and quality of research and improving research assessment



The Thai HTA guidelines – a dynamic tool

The 1st issue (2008)



Refinement (2012)



HTA application
rather than theory



The 2nd issue (2013)

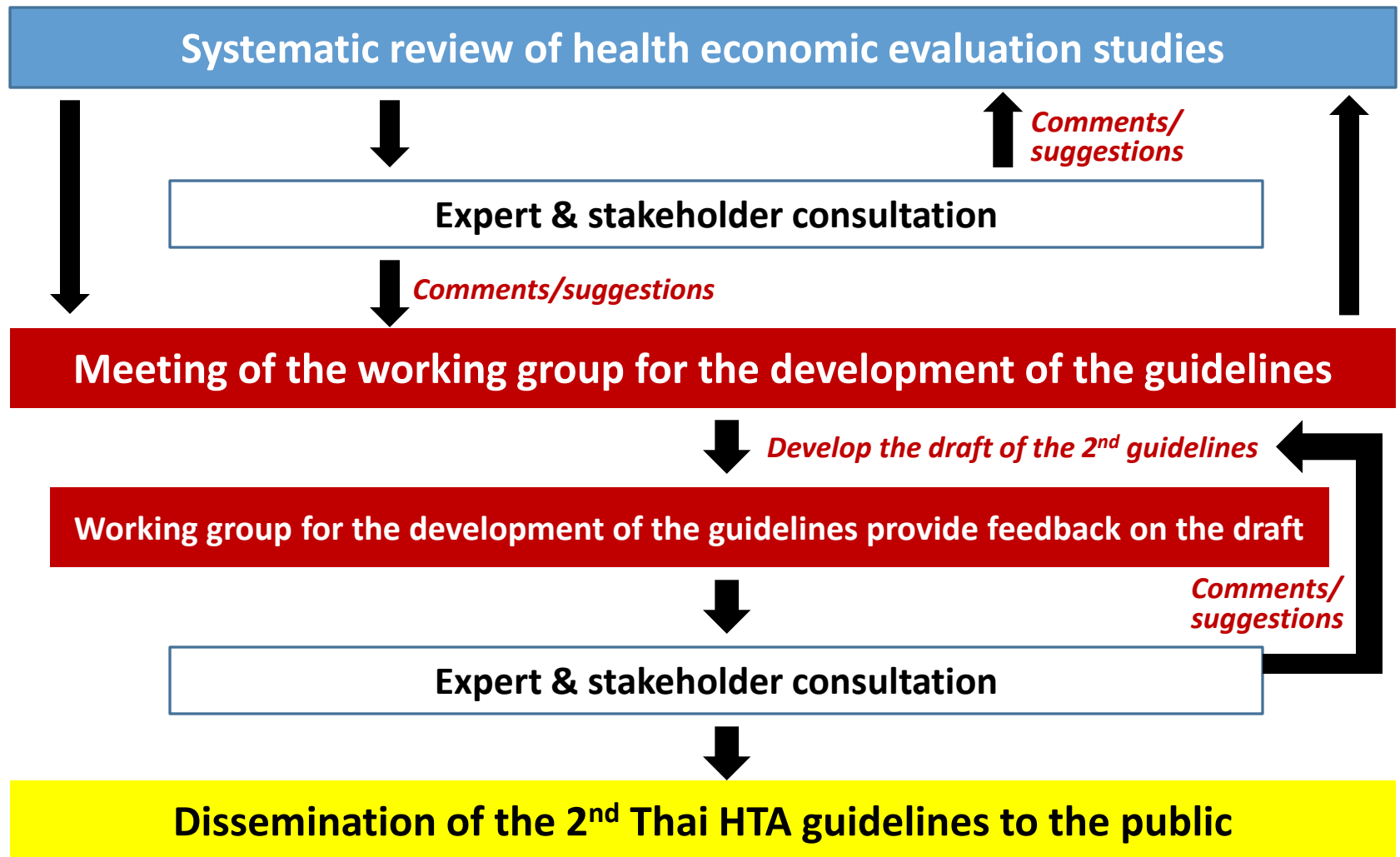
- Theoretical basis
- Widely used as a manual for performing research

But there were some limitations:

- No consideration to other issues for HTA
- Complicated & hard to understand
- Some out-of-date elements identified



The 2nd Thai HTA guidelines development process



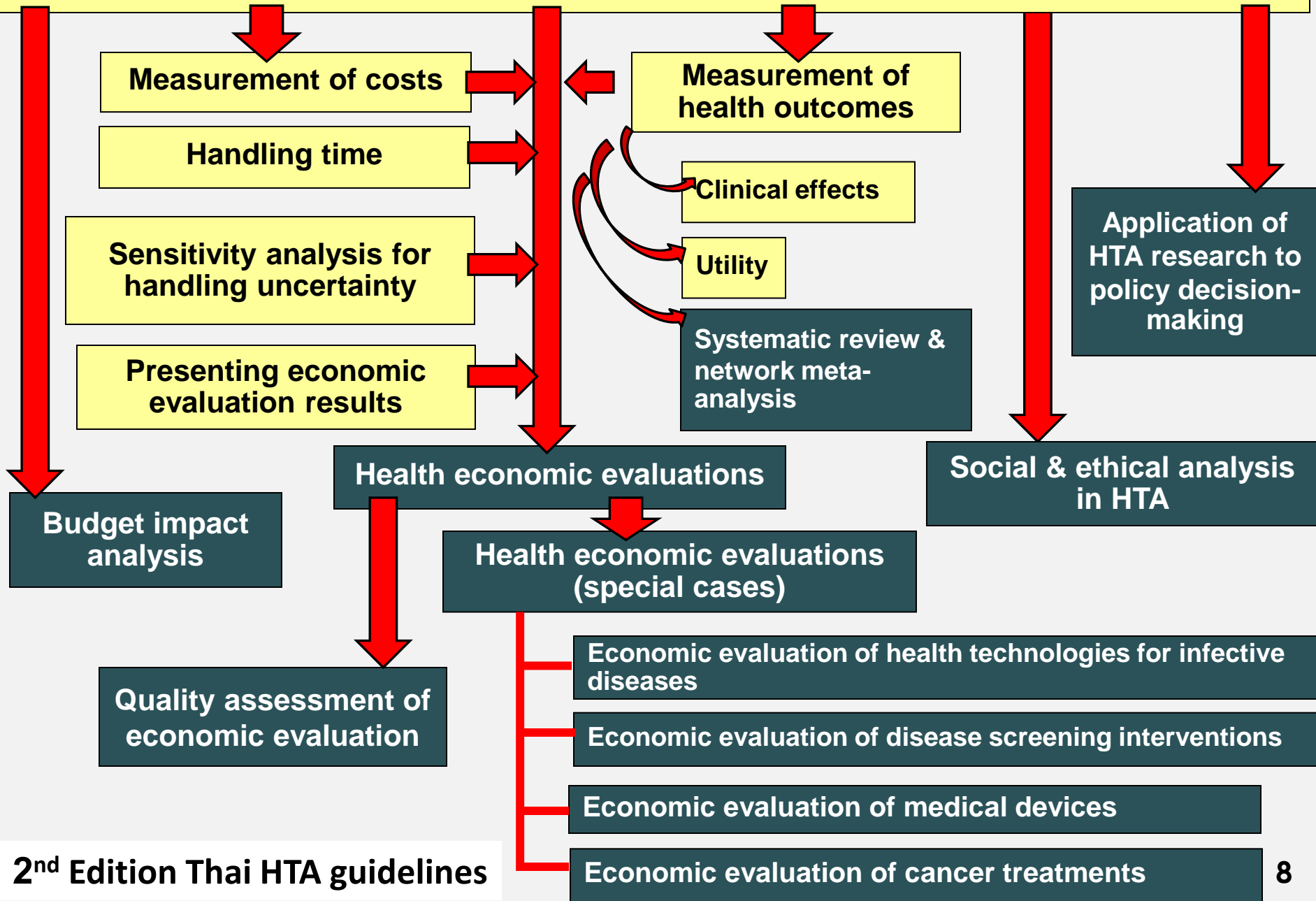
Second edition of the Thai HTA guidelines

- Improving the quality & standard of HTA in Thailand by increasing the availability of high quality HTA data
- Looking at HTA from a budgetary, social & ethical standpoint, as well as an economic standpoint
- Giving guidance on how the guidelines should be applied



Concise, Consisting of an introduction, outline of concepts and principles, & a summary of recommendations

Defining the scope of HTA & types of health economic evaluation





Application of HTA guidelines in Thailand

Thai Health Technology Assessment guidelines

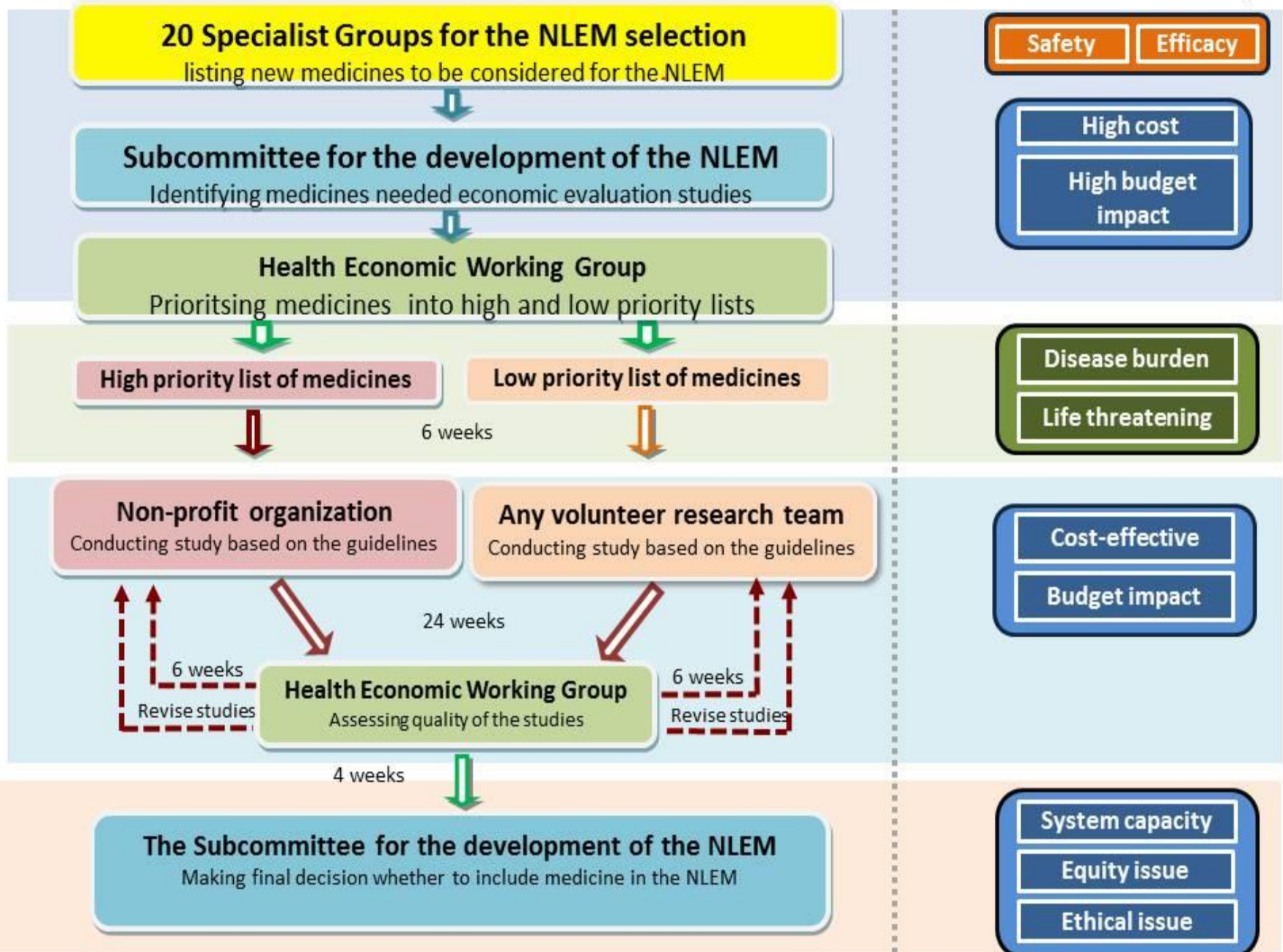
- Both editions of the Thai HTA guidelines were approved by the Subcommittee for Development of the National List of Essential Drugs and the Subcommittee for Development of the Health Benefit Package and Service Delivery of the NHSO
- Used as the compulsory guidelines when preparing the economic evaluation information for the benefit package coverage decisions



The 1st issue (2008)



The 2nd issue (2013)



Thailand HTA process guidelines



Step 1

*Stakeholders' meeting on scope of the study



Step 4

*Stakeholders' meeting on the preliminary results of the study



Step 2

Researchers present proposal to the Health Economic Working Group



Step 5

Research quality inspection: internal and external reviewers



Step 3

Researchers conduct studies



Step 6

Researchers present the results to the Health Economic Working Group



Step 7

Writing up the study report that include executive summary and policy recommendation



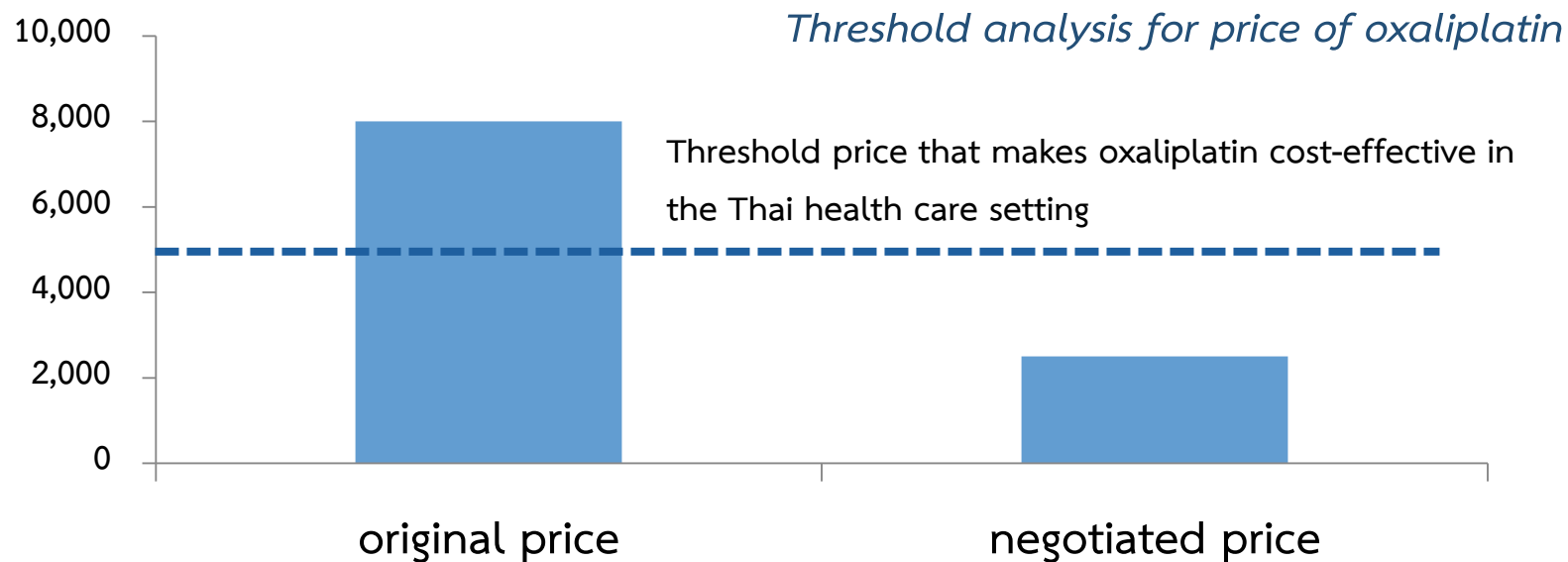
*Stakeholders include medicine nominators, practitioners and all clinical experts in the field, and pharmaceutical representatives

Example: Cost-effectiveness on the national drug reimbursement list development Thailand: ICER threshold around 160,000 THB per QALY gained (1.2 GNI per capita) (2013)

Medicines	Indications	Baht/QALY	Decision	Year
Peg-interferon alpha 2b	chronic hepatitis C subtype 2, 3	cost-saving	Yes	2011
Peg-interferon alpha 2a	chronic hepatitis C subtype 2, 3	cost-saving	Yes	2011
lamivudine or tenofovir	chronic hepatitis B	cost-saving	Yes	2011
bevacizumab	Age-related macular degeneration, diabetic macular edema	cost-saving	Yes	2012
intravenous immunoglobulin	Dermatomyositis	cost-saving	Yes	2013
intravenous immunoglobulin	chronic inflammatory demyelinating polyneuropathy (CIDP)	57,000	Yes	2013
intravenous immunoglobulin	idiopathic thrombocytopenic purpura (ITP)	87,000	Yes	2013
oxaliplatin (FOLFOX)	advance colorectal cancer	126,000	Yes*	2012
sildenafil	pulmonary arterial hypertension	168,000	Yes	2013
Galantamine, donepezil or rivastigmine	mild-to-moderate Alzheimer's disease	157,000-240,000	No	2010
alendronate, risedronate, raloxifene	osteoporosis	300,000-800,000	No	2008
rituximab + CHOP regimen	diffused large B-cell lymphoma	600,000	No	2013
bosentan or iloprost	pulmonary arterial hypertension after failing sildenafil	1,023,000-4,462,000	No	2013
sunitinib	metastasis renal cell carcinoma	2,400,000	No	2013
rituximab	rheumatoid arthritis	1,100,000	No	2013
gefitinib or erlotinib	Second-line treatment for non-small cell lung cancer	1,500,000-2,000,000	No	2013
ustekinumab	chronic plaque psoriasis	3,500,000	No	2013
imiglucerase	Gaucher disease type 1	6,300,000	Yes*	2012



Examples of using health economics information in price negotiations



Medicine	Original price (THB)	Reduced price (THB)	Potential saving (THB per year)
Tenofovir	43	12	375 million
Pegylate interferon alpha-2a (180 mcg)	9,241	3,150	600 million
Oxaliplatin (injection 50 mg/25 ml)	8,000	2,500	152 million



Challenge

- Measuring the impact (health or economic outcomes) of the HTA research, conducted following the HTA guidelines, used to inform policy decision makings