Developing effective HTA structure within HEALTHCARE SYSTEM lesson learnt from Thailand

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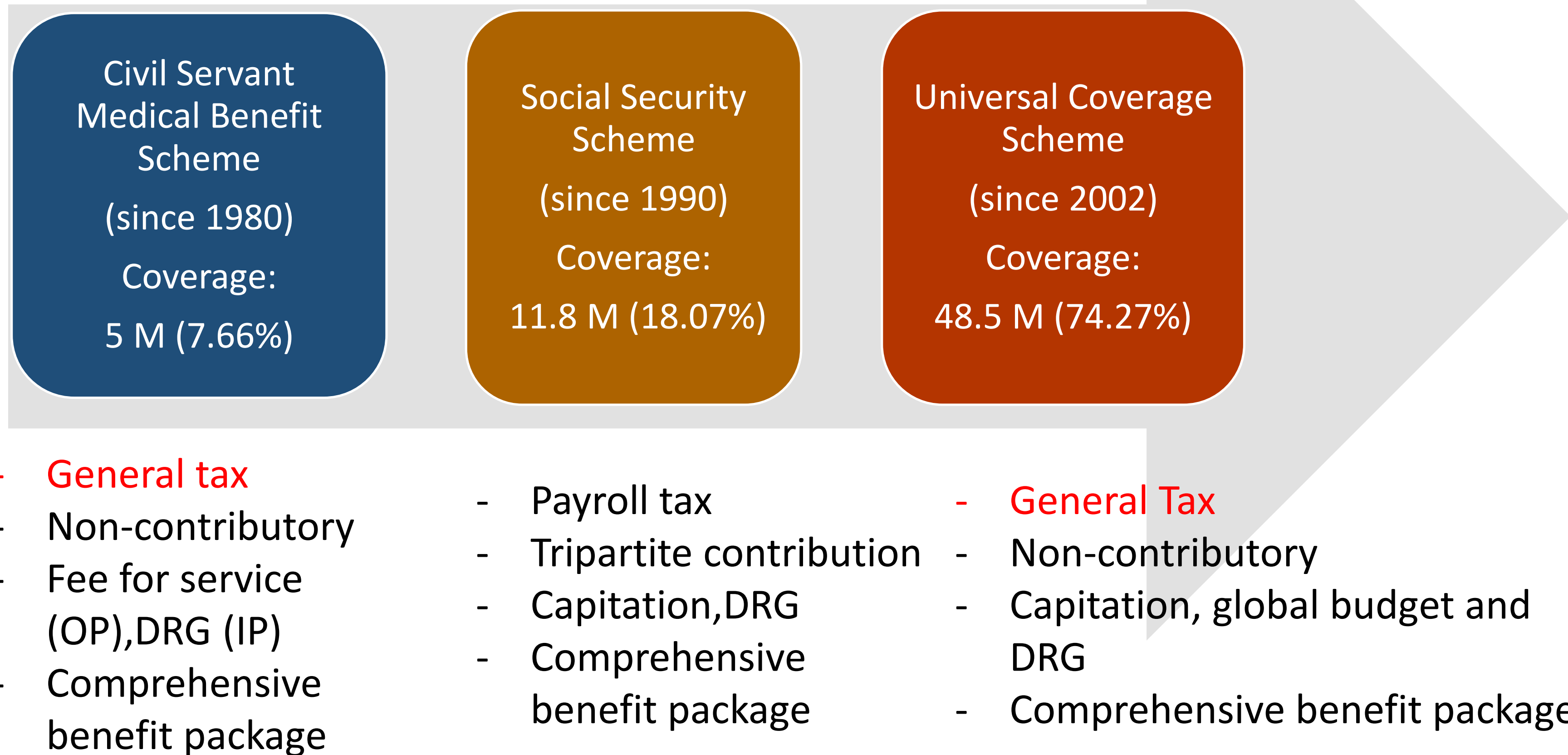
Health Insurance Schemes

- Gradual insurance coverage expansion given strong health care infrastructure



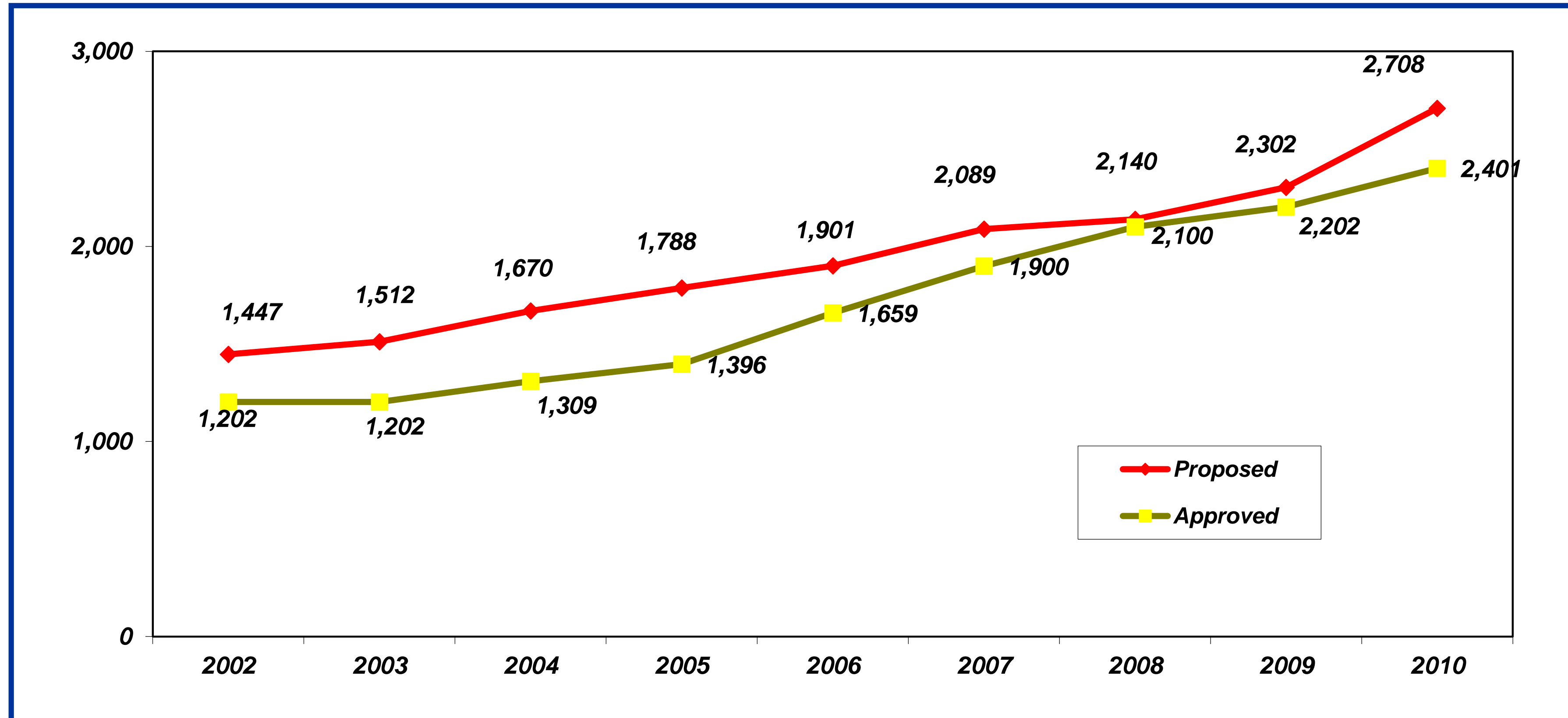
- General tax
- Non-contributory
- Fee for service (OP),DRG (IP)
- Comprehensive benefit package

- Payroll tax
- Tripartite contribution
- Capitation,DRG
- Comprehensive benefit package

- General Tax
- Non-contributory
- Capitation, global budget and DRG
- Comprehensive benefit package

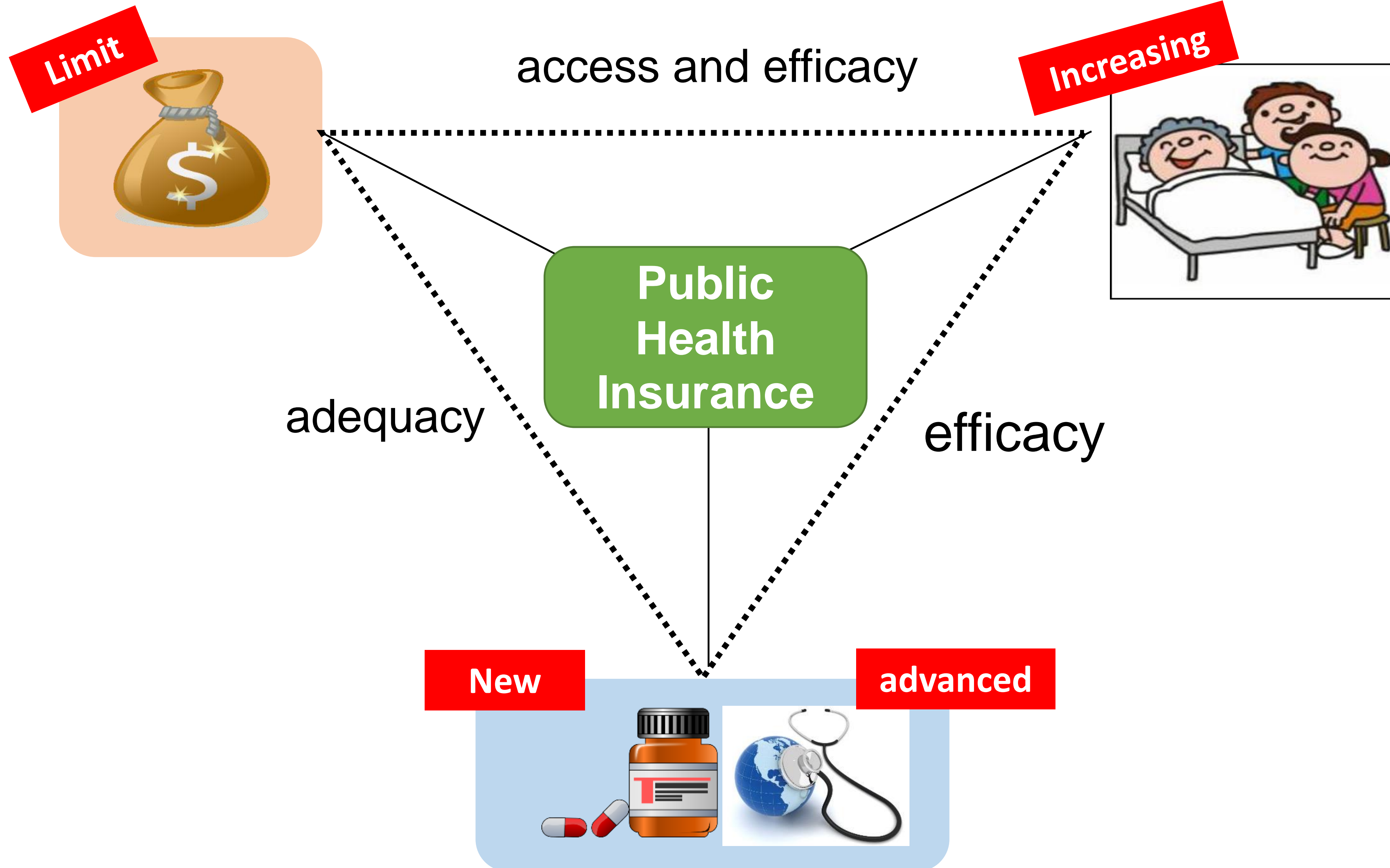
NHSO
National Health Security Office

Proposed versus approved capitation rate for UCS
Baht per capita nominal term 2002-2010



3109.78 Baht in 2017 equivalent to 94.23 USD for a basic package

The balanced perspectives

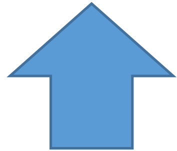


Policy makers need more evidences

Faster acccess
- new drug
- Advanced technology
- Expensive intervention

don't always get better outcomes

Global



UHC

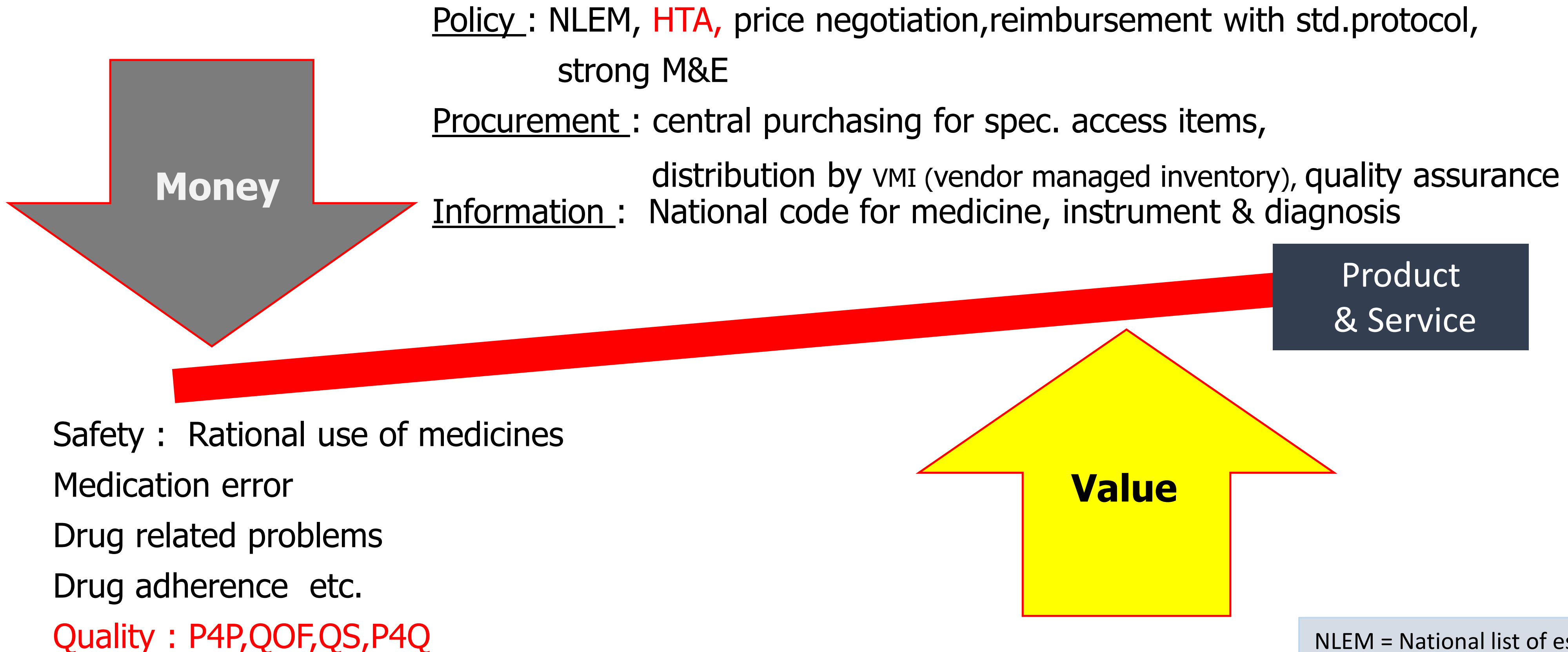
new drug, advanced technology,

budget constraints

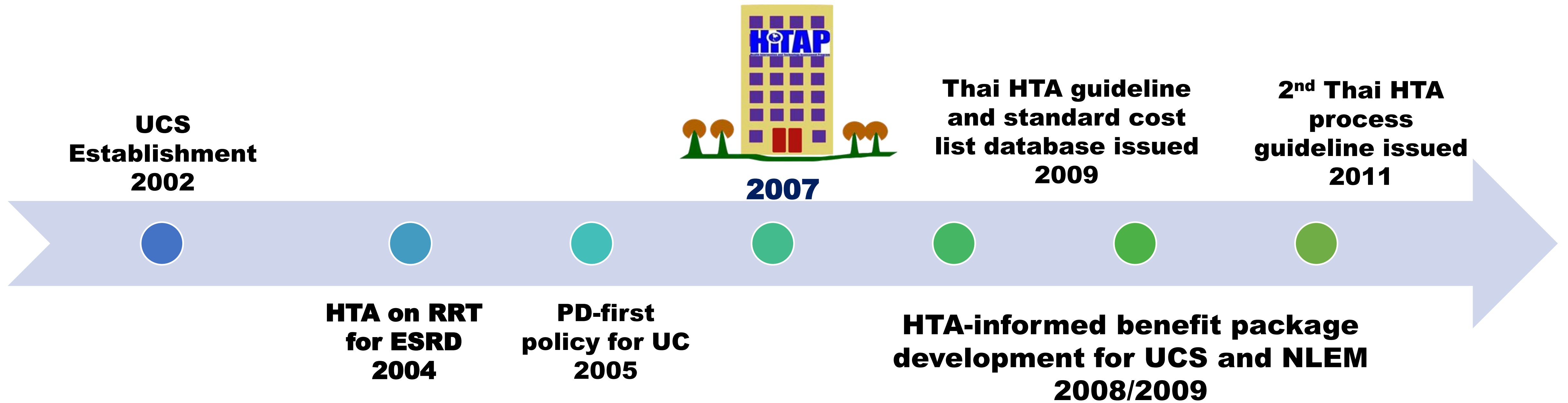
country

organization

Strategies for increasing the value for money

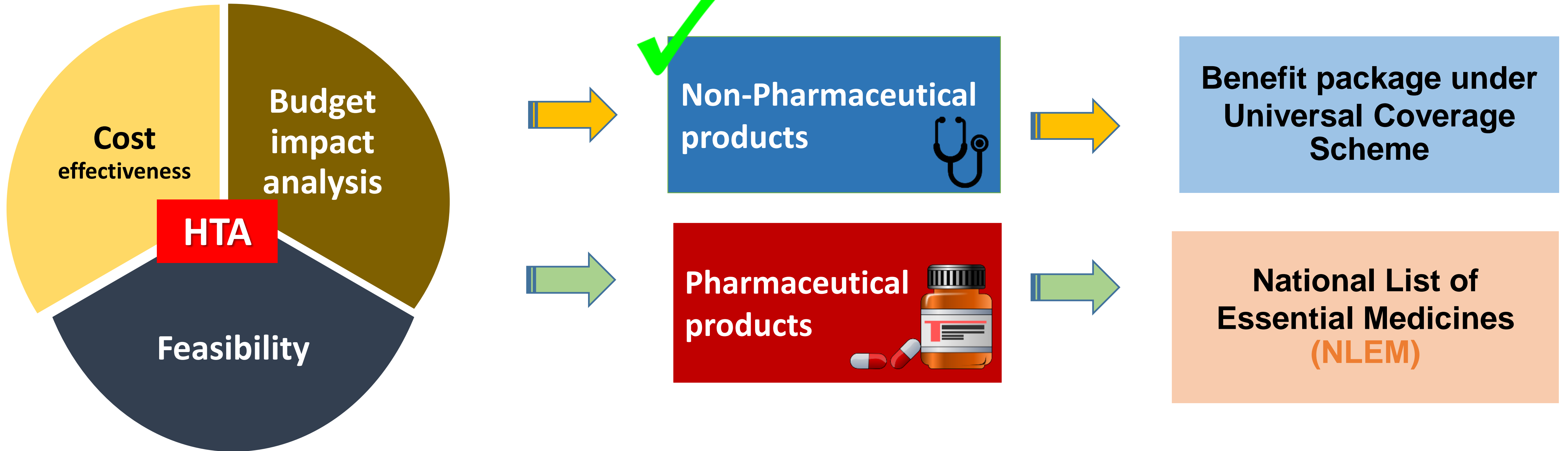


NLEM = National list of essential medicines
HTA = Health technology assessment
QOF = Quality outcome framework
QS = Quality Standard



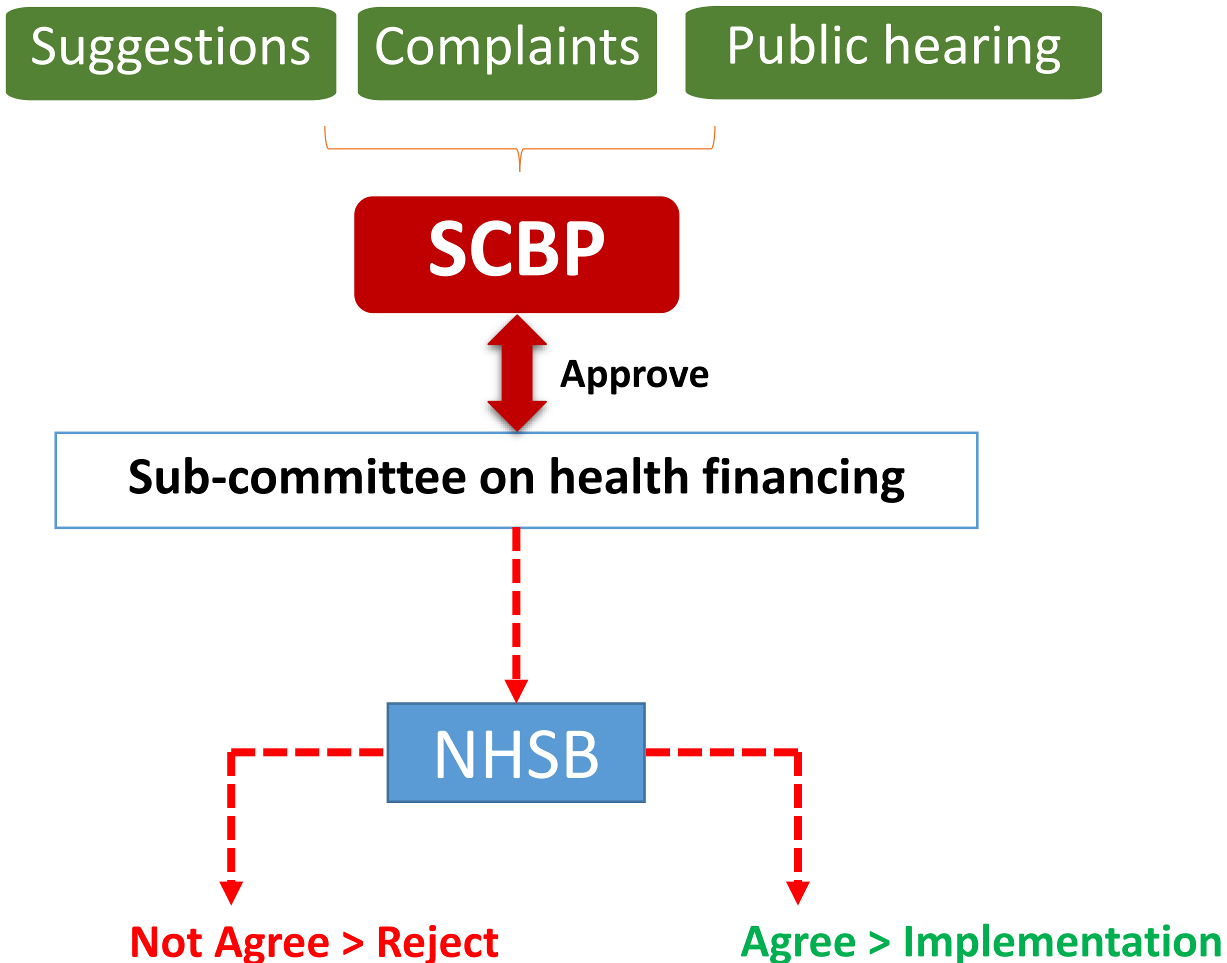
Role of HTA in Thailand

Using HTA in benefit package decisions in Thailand



HTA = Health Technology Assessment
NLEM = National list of essential medicines

Benefit Package of the Universal Coverage Scheme



Three major problems:

I. There were a large number of issues proposed by various groups of stakeholders to the SCBP.

II. The presentations made to the SCBP varied in the quality of evidences to support the proposals wherein some presentations were based on expert opinions or case studies.

III. It was evident that there was a bias toward power groups who could lobby the Secretariat.

SCBP = Sub-committee for the development of Benefits Package and Service Delivery
NHSB = National Health Security Board

UCBP = The Development of the Universal Health Coverage Benefit Package Project

HITAP = Health Intervention and Technology assessment Program
IHPP = International Health Policy Program

Benefit Package of the Universal Coverage Scheme

Suggestions | Complaints | Public hearing

SCBP

Approve

"Technical body"

- Systematic
- Transparent
- Participatory
- Evidence-based

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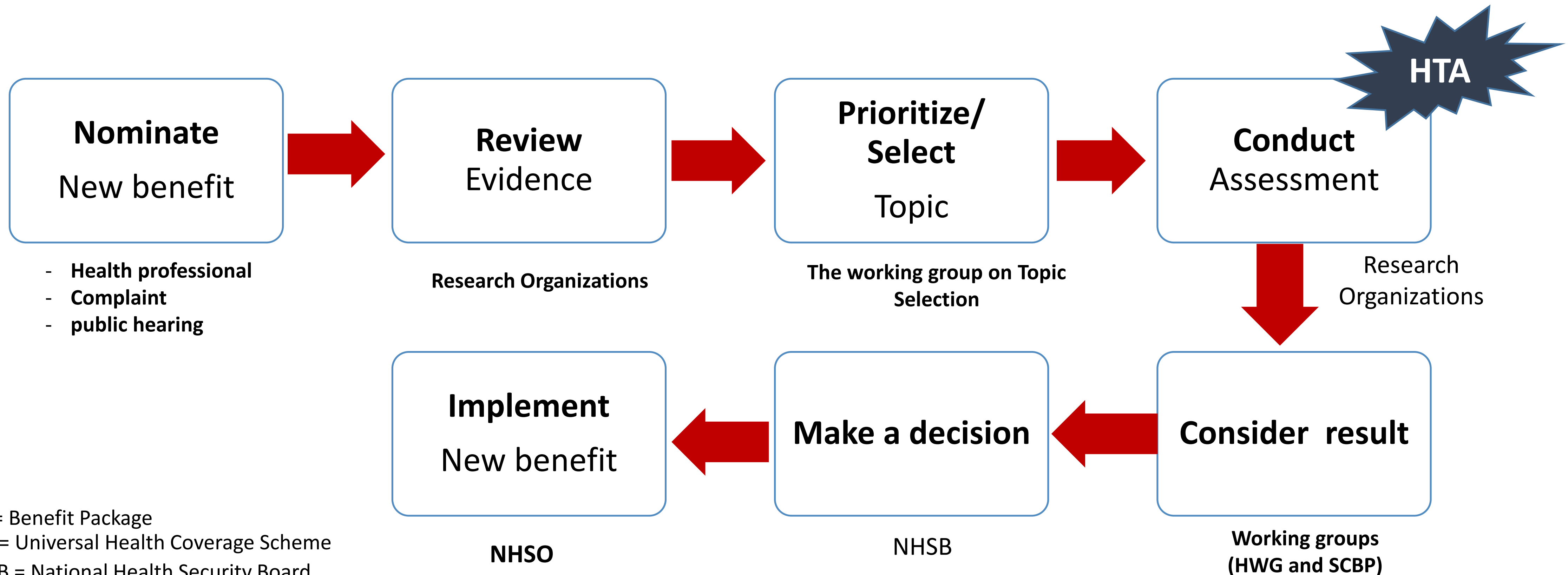
Key Developments of Benefit Package under UCs



BP = Benefit Package
UCs = Universal Health Coverage Scheme
NHSB = National Health Security Board
NHSO = National Health Security Office
SCBP = Sub-committee for the development of Benefits Package and Service Delivery
HWG = Health Economics Working Group

Why do we need “HTA process guideline”?

Thailand HTA process guidelines

Step 1
*Stakeholders' meeting on scope of the study

Step 2
Researchers present proposal to the Health Economic Working Group

Step 3
Researchers conduct studies

Step 4
*Stakeholders' meeting on the preliminary results of the study

Step 5
Research quality inspection: internal and external reviewers

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

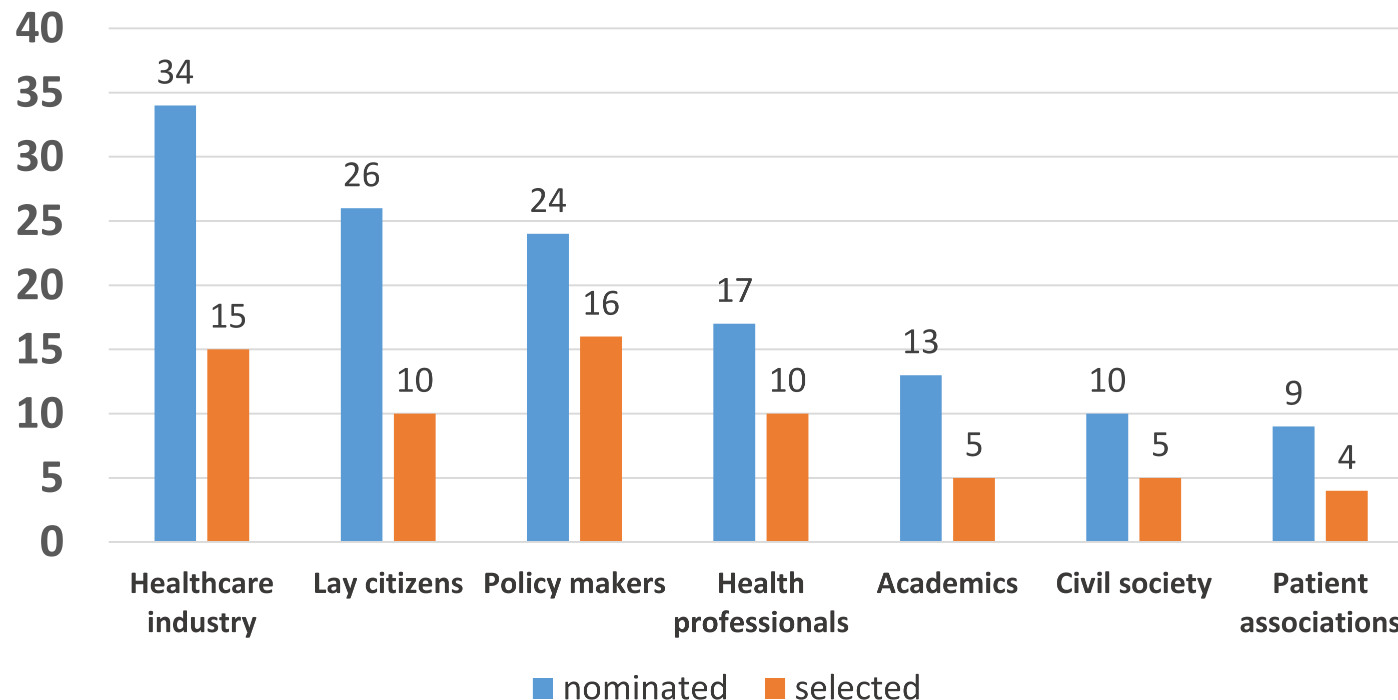
*Stakeholders include medicine nominators, practitioners and all clinical experts in the field, and pharmaceutical representatives

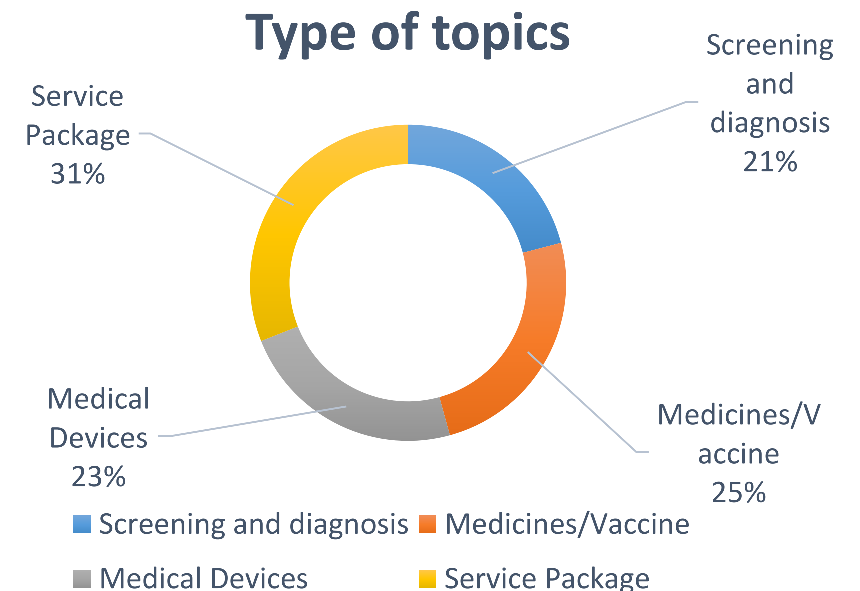
Topic nomination meetings of civil groups and lay citizens

The Development of the Universal Health Coverage Benefit Package Project

Between 2010-2015

129 Nominated **63** Selected for assessment





UCBP process 2018

BP nomination

8 groups

- Policymakers - Civic group
- health professionals - Lay citizens
- Academics - patients
- Healthcare industry
- Other subcom /working group

Nominate the topics annually

Topic selection

3 working groups

- working groups on topic review & selection
- Benefit package subcom.
- Health Economic working group

Review evidence based on the topic selection criteria

Prioritize the topics by the working groups for an assessment based on consensus

Present a list of prioritized topics to HTA WG

Need or impact for BP review

- New benefit
- Existing benefit with
  - ineffective coverage
  - Implementation research

Assessment

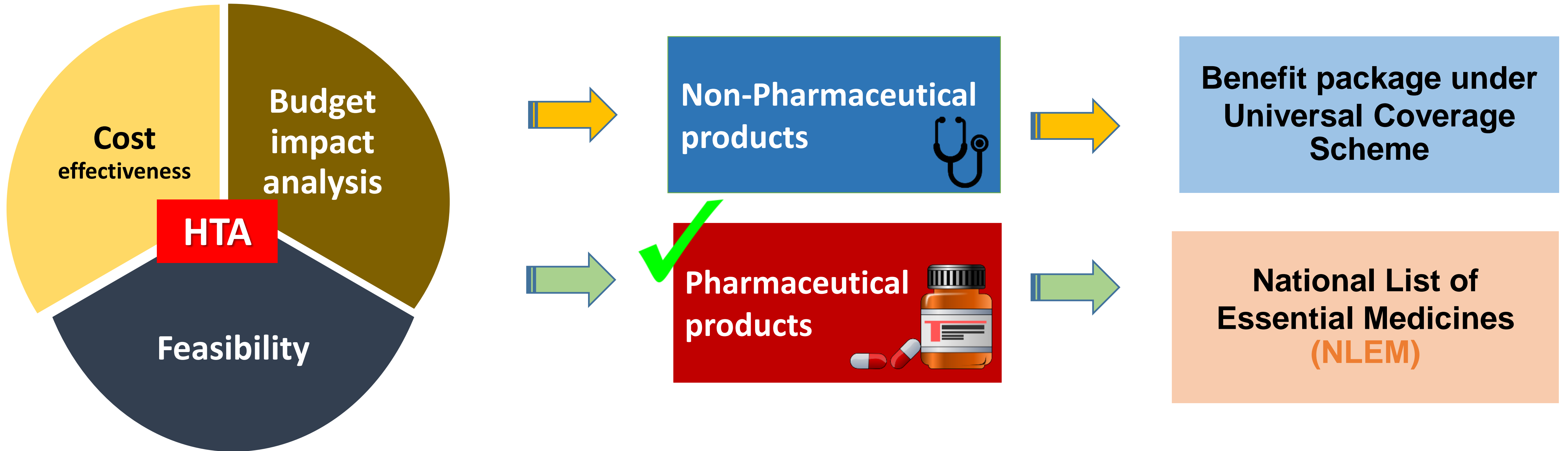
Conduct an assessment by HTA institutes & submit to HTA WG

- Health outcome
- Economic evaluation
- Budget impact
- Social /Ethical impact
- Feasibility

Decision

Make a decision by Sub-committee for the development of Benefits Package and Service Delivery

Using HTA in benefit package decisions in Thailand



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Selection Process of Thai National List of Essential Medicines (NLEM)

Academics
Industrial
Public hearing

The 22 National Expert Panels for each drug group
appraisal for the items included in NLED

The Screening Working Group
coordinate results from 24 working groups cost-effectiveness, equity, national affordability.

The Health Economic Working Group

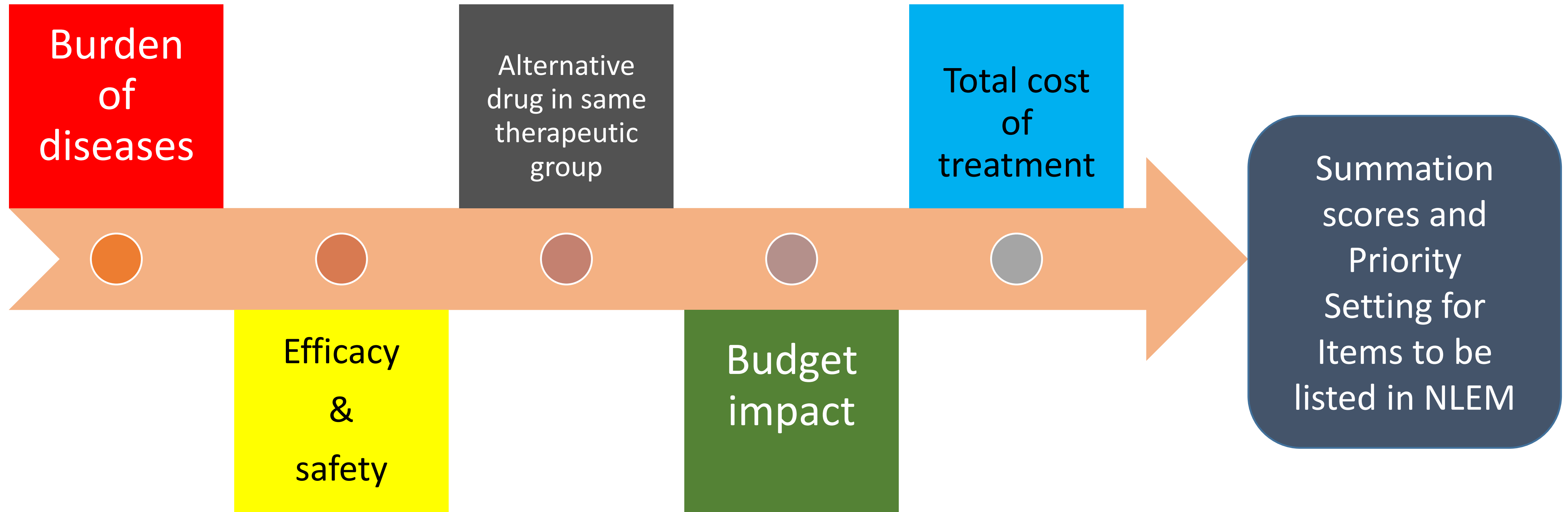
Price negotiation working Group

NLEM Subcommittee
approve NLEM.

Priority setting steps before reimbursement

NLEM Committee
make a final decision

Priority setting step before final approval



Cost-Effectiveness threshold and price negotiation

- If success : doesn't mean to be included in NLED
- If not : doesn't mean to be excluded

Incremental Cost (THB)

500,000

1. ICER 300,000 THB/QALY at current price

2. Negotiated price based on CE threshold

Incremental QALY

-5

5

3. Final negotiated price based on budget impact and affordability of 3 schemes

Accept the technology if ICER < 160,000 THB/QALY*

-500,000

*5,000 USD (1 USD = 35 THB)

What HTA provided for UCS development

- Evidence of cost effectiveness
- Value for money
  - Incremental cost-effectiveness ratio (ICER)
  - Cost-effectiveness threshold = 160,000 THB/QALY (5,000 USD)
- Budget impact compared current practice and new intervention
- Feasibility study
- Simulation the threshold affordable prices for price negotiation
- Equity considerations

Using economic evaluation to inform NLEM development during 2007-2010

Cost-effectiveness study	Finding	Recommendation
HMG-CoA reductase inhibitors	Atorvastatin not cost-effective	Not included atorvastatin in the list
Osteoporosis drugs	not cost-effective	Not included in the list
Acetylcholinesterase inhibitors	not cost-effective	Not included in the list
Peginterferon alfa-2a, 2b	cost-effective	Included in the list
Tenofovir	cost-effective	Included in the list
Oxaliplatin	not cost-effective	Price negotiation and included in the list

Basic of decision making for policy maker

- Subsidy considered on the basis of Cost effectiveness, incremental cost effectiveness ratio (ICER)

  →*Cost effectiveness is a key, but not sole criterion* for listing
- Catastrophic prevention
- Medium to long term budget impact assessment
- Ethical consideration
- Supply side capacity to scale up new interventions
- Equity consideration
- Monitoring and evaluation

  - Accessibility, Efficiency, Quality and Effectiveness in Healthcare

Appraisal results and decision making

Table 4 – The relationship between assessment and appraisal results.

Policy recommendation	Assessment results*			
	Cost-effective (ICER ≤1 per-capita GDP/QALY)		Not cost-effective (ICER >1 per-capita GDP/QALY)	
	Low budget impact†	High budget impact†	Low budget impact	High budget impact
Recommended	• Lamivudine for treatment of people with chronic hepatitis B • Intravenous cyclophosphamide + azathioprine for treating severe lupus nephritis • Smoking cessation program	—	— • Imiglucerase for Gaucher type 1	— • PD-first policy for ESRD
Not recommended	• Implant dentures for people who have problem with conventional complete dentures	• Pegylate interferon alpha 2a + ribavirin for treating hepatitis C • Absorbent products for urinary and fecal incontinence among disabled and elderly people	—	• Anti-immunoglobulin E for severe asthma

ICER, incremental cost-effectiveness ratio; GDP, gross domestic product; QALY, quality-adjusted life-year; THB, Thai baht.

* Two cost analysis studies, that is, screening for risk factors for leukemia in people living in the industrial areas, and system for screening, treatment, and rehabilitation of alcoholism, are not included in this table.

† High budget impact >THB 200 million per annum; low budget impact ≤THB 200 million per year.

Before using IRP, Thailand must first use HTA to determine the value and prioritize each new product

Level of coverage / Time to reimbursement	Slow (>3 years post-launch)	Delayed (1-3 years post-launch)	Fast (within 1 year of launch)
High (≥80%)	7	4	1
Medium (≥ 40%, <80%	8	5	2
Low (<40%)	9	6	3

1. Product **of high clinical/economic value to the whole population**; e.g., vaccines
2. Product of **high clinical value to a large sub-population**; e.g. HIV anti-virals
3. Product of **high clinical value to a small population**; e.g., post chemo oncologics
4. Product of **value to whole population, but not an imminent priority**; e.g. anti-bacterials where alternatives exist
5. Product of **value to a large sub-population**, but not an imminent priority; e.g. novel anti-diabetics,
6. Product of **value to a small population**, but not an imminent priority; e.g. anti-TNFs after DMARD failure
7. Product useful to whole population, however **several low-cost alternatives exist**; e.g., statins with generics
8. Product useful to **large sub-population**, and **several low-cost alternatives exist** e.g., cvd drugs
9. Product useful to **small sub-population**, and **several low-cost alternatives exist**