WEBINAR

KNOWLEDGE EXCHANGE IN THE TIME OF COVID-19

Introduction to Webinar 1: Identification and Prioritization of Healthcare Interventions

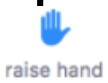
Leslie Ong (UNDP) and Alia Luz (HITAP)

THE ACCESS AND DELIVERY PARTNERSHIP

UNDP

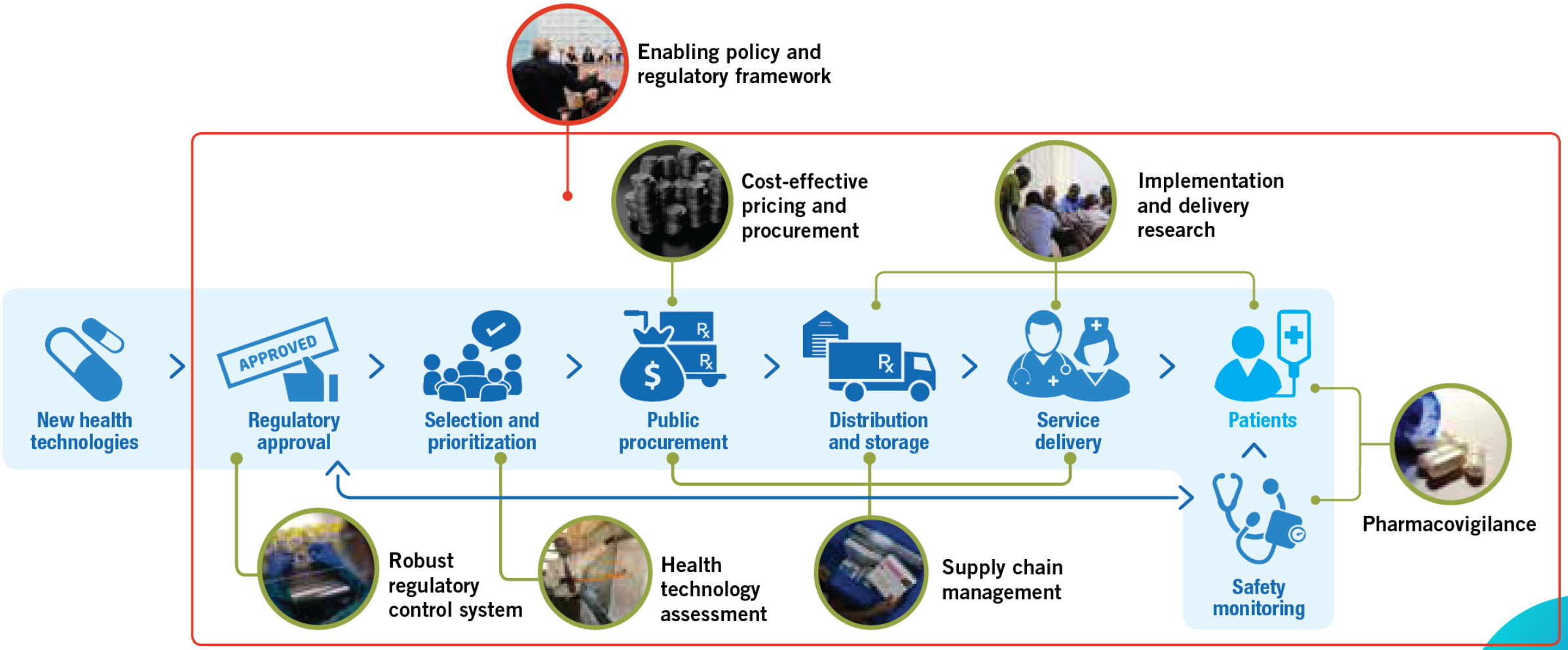
HITAP Health Intervention and Technology Assessment Program WEBINAR

House Rules

- Let get to know each other: please indicate your **name and organisation/country** in the Zoom video box.
- Let's make sure all **microphones** are **muted** unless you are speaking.
- If you wish to ask a question or share comments, please press the **raise hand button** 

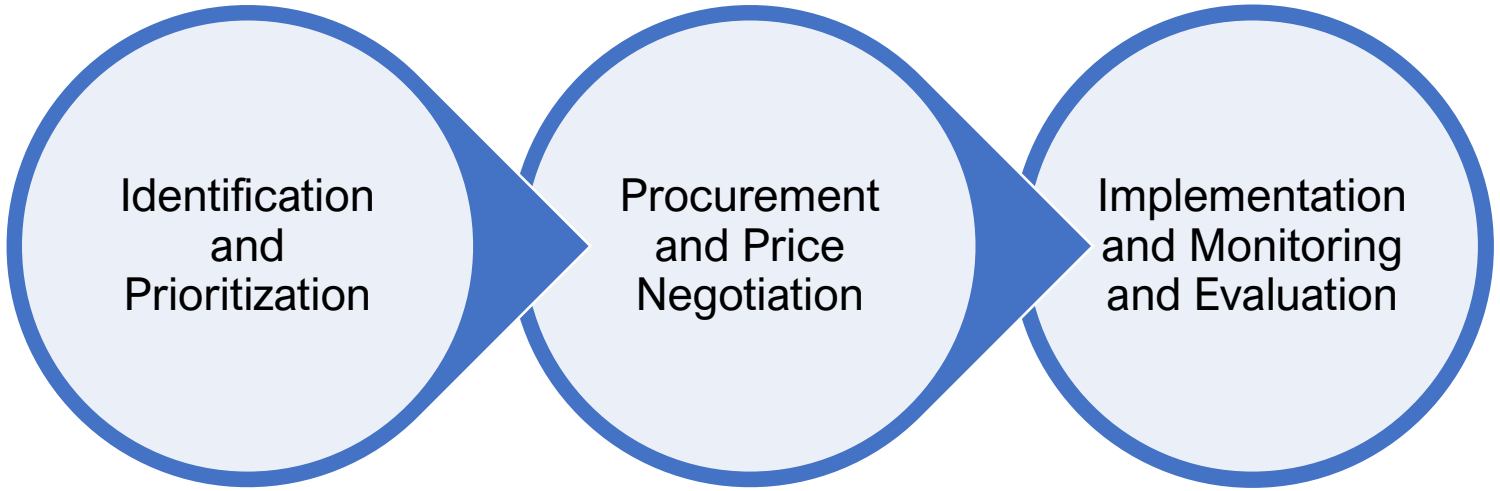
on the Zoom participant box function and wait for acknowledgement from the host. Please feel free to type questions and comments in the Zoom chat box as well.
- Finally, we will be **recording** these sessions. Please raise any questions or concerns in the chat box as well.
- **French translation** is available by clicking the **'Interpretation'** option in the taskbar at the bottom of your Zoom screen.

Working across the value chain of access and delivery

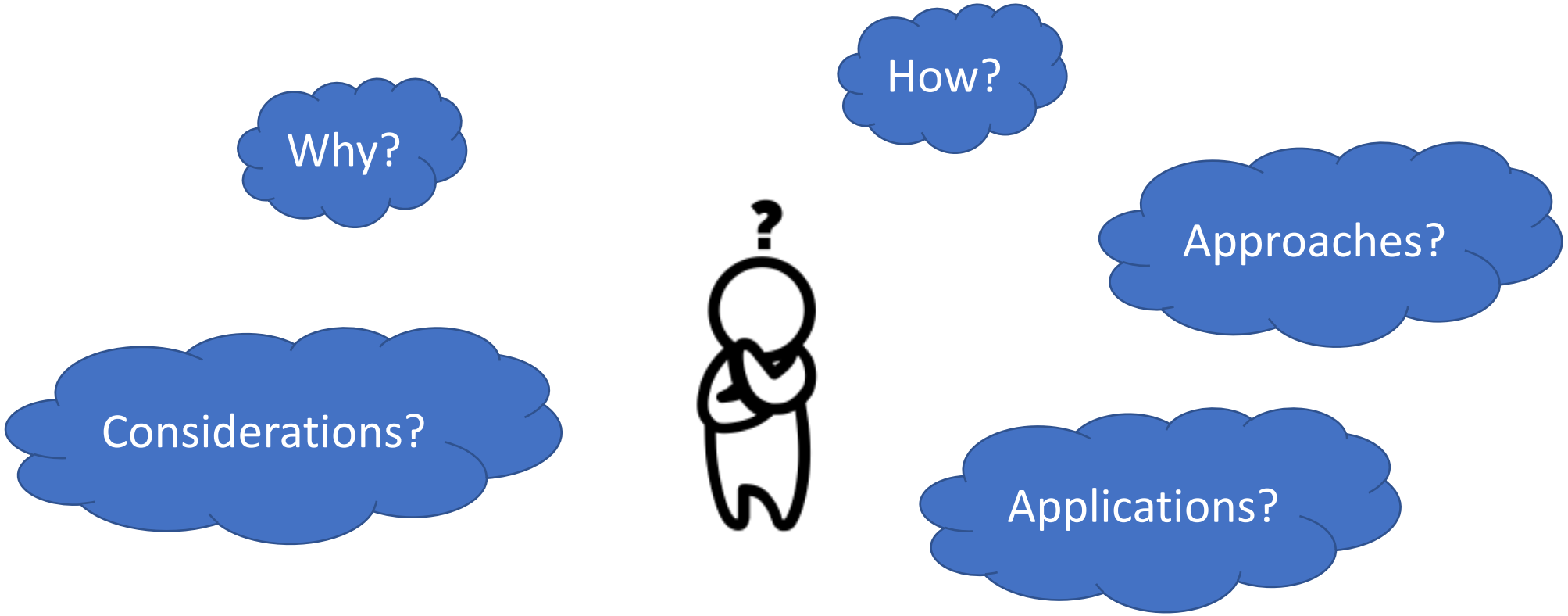


Webinar Series Overview

Use of evidence in a healthcare technology or intervention's life cycle in the context of UHC and emergencies such as the COVID-19 pandemic



Objectives of Webinar 1: Identification and Prioritization



Outline

Getting Down to Business	Introduction
Covering All the Bases	The Priority-Setting Process
The Building of a Foundation	Ghana's Priority-Setting Process
Politics Without Principle?	The Impact of Politics in the Time of COVID-19
Rationing Critical Care	The Thai Guidelines for Prioritizing Critical Resources
Learning the Tools of the Trade	Discussion
Break	
Balancing Trade-Offs	Introduction to the Exercise
Thought to Action	Exercise!
That's a Wrap!	Summary and Ways Forward

Welcome to our speakers

Prof. Wanrudee Isaranuwatchai,
HITAP

Prof. Jesse Boardman Bump,
Harvard University

Prof. Ole Frithjof Norheim,
University of Bergen

Dr. Brian Asare,
Ghana Ministry of Health

Dr. Hugo Turner,
Imperial College London

Mr. Leslie Ong,
UNDP

Ms. Rachel Archer,
HITAP

Ms. Alia Luz,
HITAP

Let’s get to know each other!

Go to the following website:

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Key in the code:

93 19 69 9

image: Freepik.com

The Priority-Setting Process

Ole F. Norheim, Professor

Bergen Centre for Ethics and Priority Setting (BCEPS)
Department of Global Public Health and Primary Care, University of Bergen

Department of Global Health and Population
Harvard T.H. Chan School of Public Health

B·ceps

HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH
Department of Global Health and Population

Plan for the talk

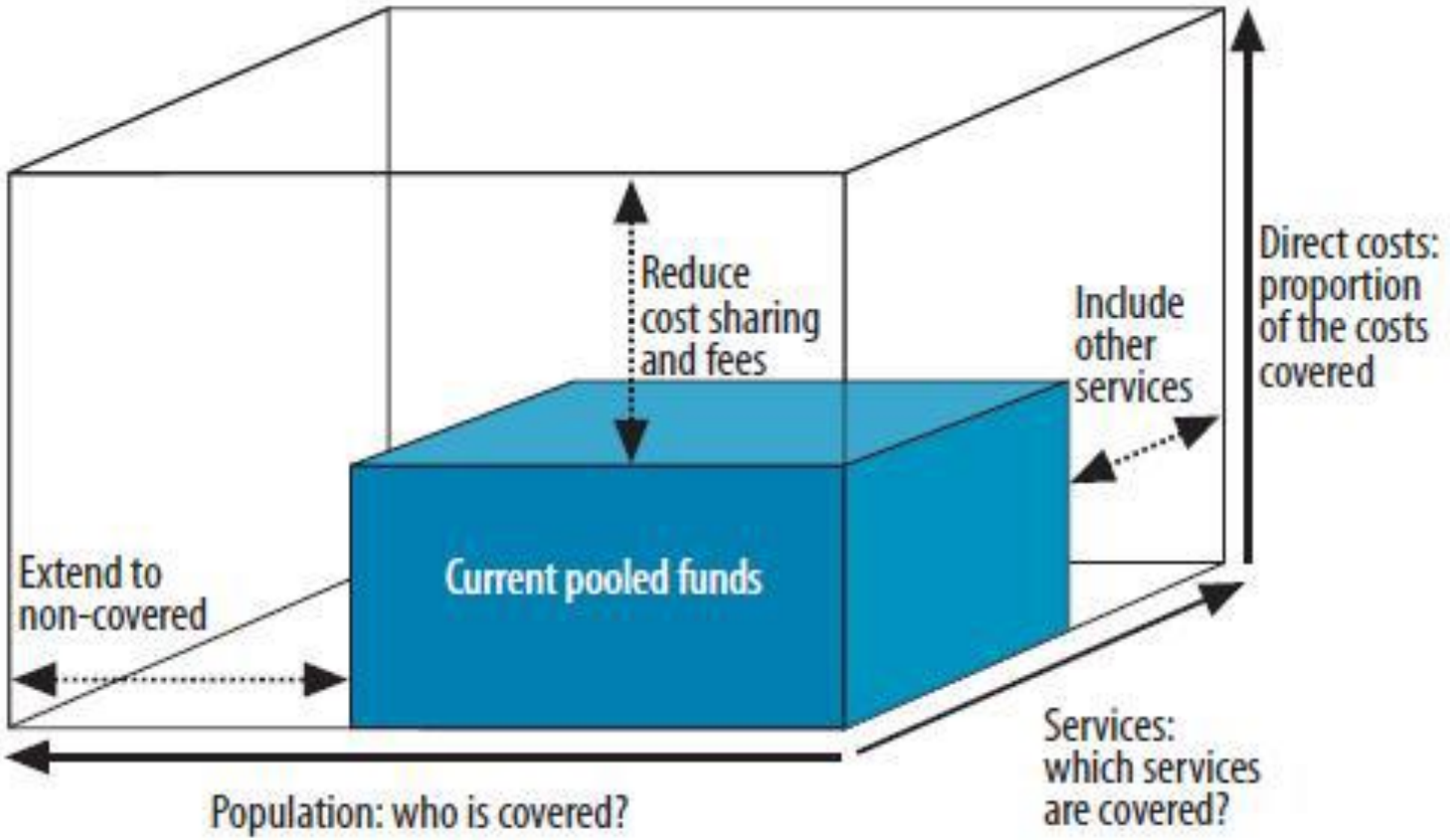
- Why is priority-setting important?
- Considerations for priority-setting
- What are the boundaries of priority-setting?

Why is priority-setting important?

- Priority setting can be defined as the ranking of services or patients according to importance

- Moving from ad hoc decision making to systematic priority setting can improve health and the fairness of the system

- The first step for countries moving towards universal health coverage



Making fair choices on the path to universal health coverage

Final report of the WHO Consultative Group on Equity and Universal Health Coverage

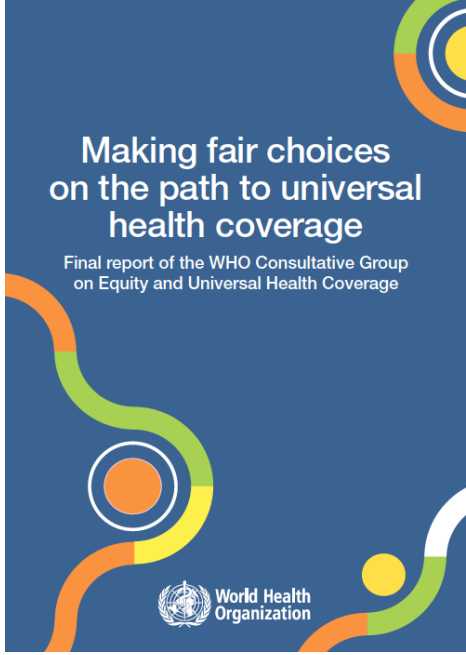
World Health Organization

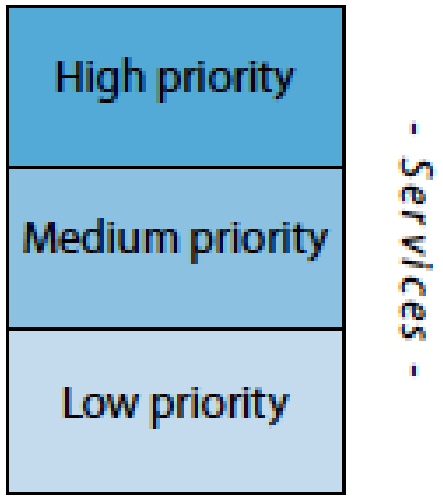
Considerations for priority-setting

- Scope
- Criteria
- Process

Scope

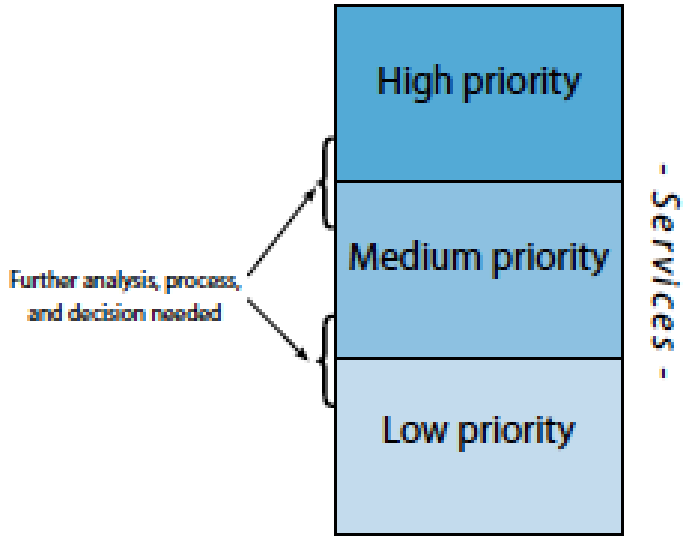
- Services include treatment and prevention, diagnostics and rehabilitation
- Scope
  - **Essential health benefit package**
  - Primary care services
  - NCD-services
  - Single health technology assessment (HTA)

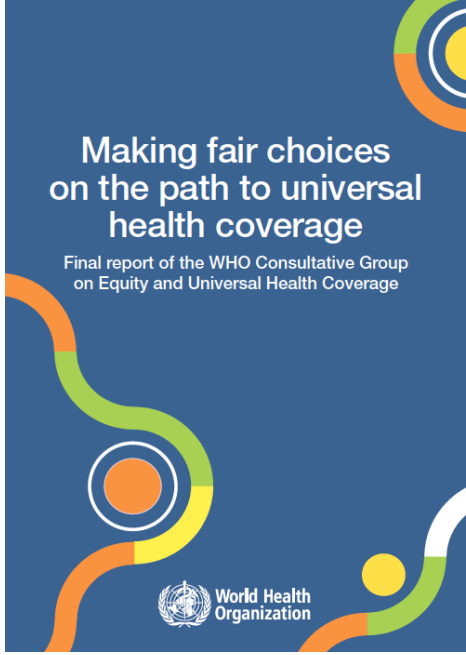




Criteria for priority setting

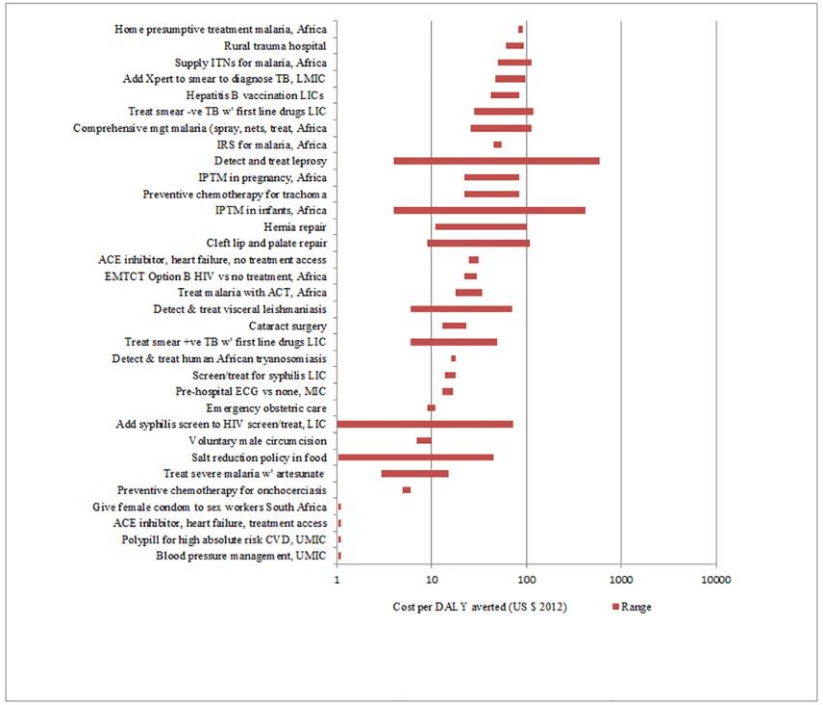
1. Cost-effectiveness
2. Priority to the worst-off
   - In terms of health
   - In terms of income or other disadvantages
3. Financial risk protection



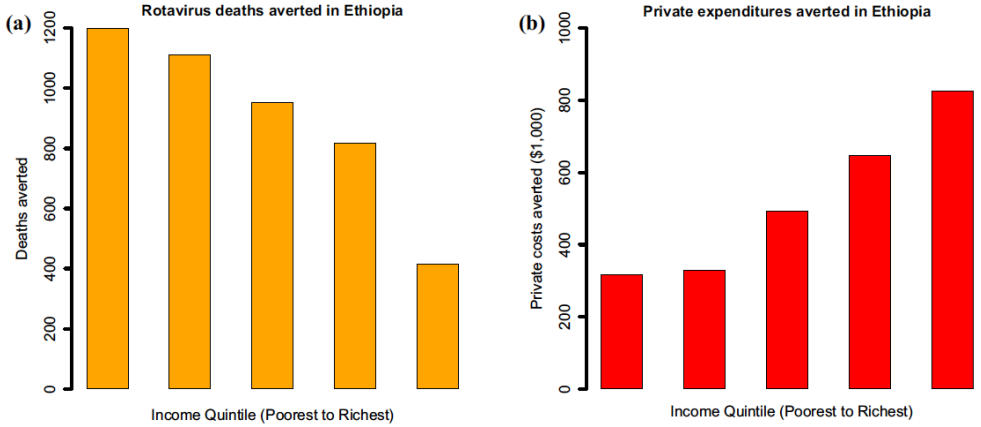


Tools

- Cost-effectiveness analysis (CEA)
  - Incremental cost-effectiveness (ICER)
  - Net cost / net health gain
  - Cost per DALY or cost per QALY



- Extended cost-effectiveness analysis
  - Dashboard on
    - Health gains – and distribution
    - Financial risk protection

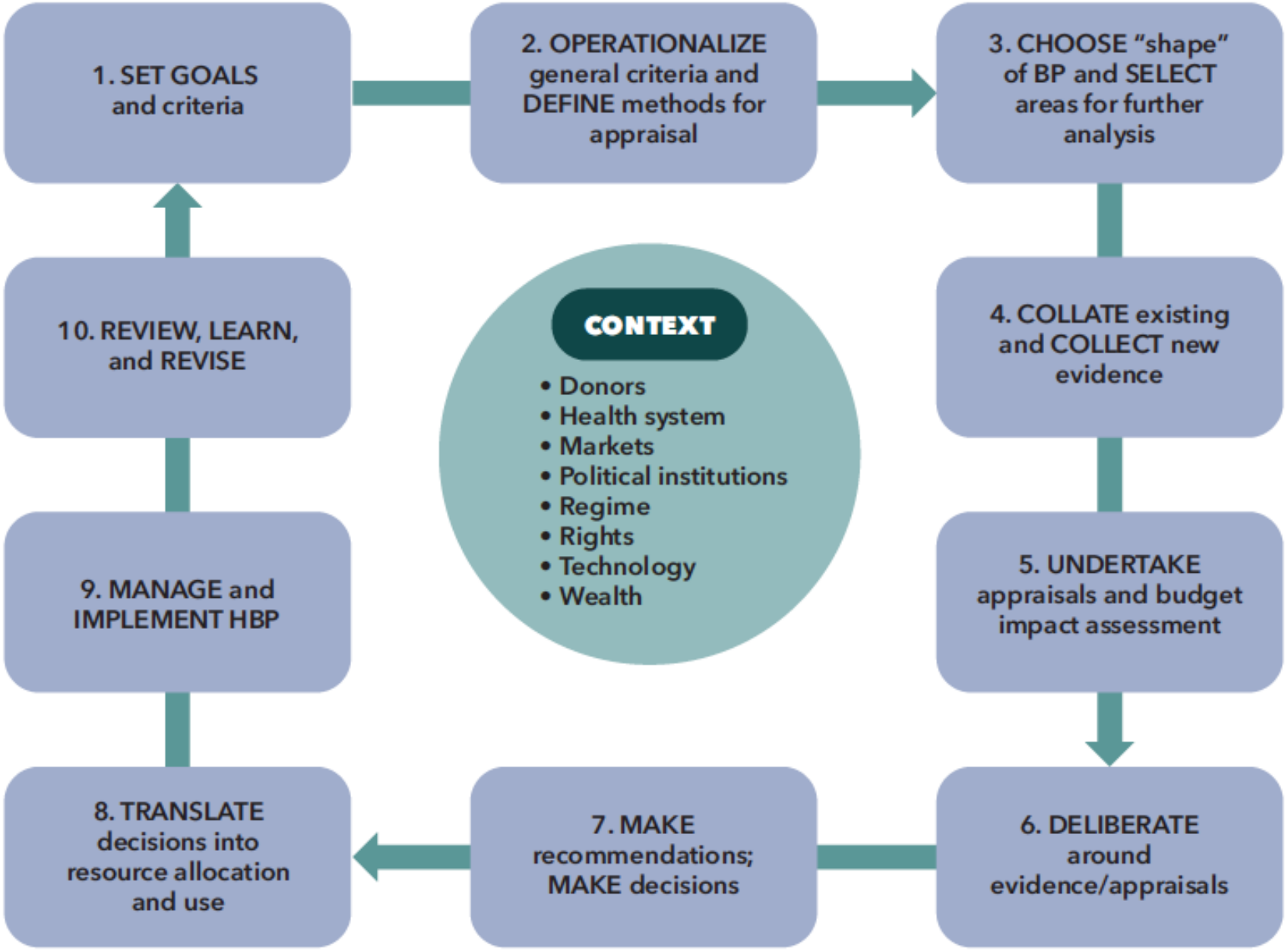


Fair and legitimate process

- Evidence-based
- Open and transparent
- Provide reasons
- Mechanisms of complaint

(Daniels N, Sabin JE. Setting Limits Fairly:
Learning to Share Resources for Health. OUP 2008)

FIGURE 1. The Core Elements of HBP Design



(Glassman, Giedion, Smith. What's In, What's Out? CGD 2017)

What are the boundaries of priority-setting?

- Priority setting creates winners and losers
- Strong interest groups
- Historical budgets, hard to move
- Complex policy process

- Defining high-priority services must be followed up with
  - Implementation
  - Procurement mechanism

Summary

- Priority-setting aims to
  - Maximize population health
  - Fairly distributed
  - With financial risk protection

- Tools
  - Cost-effectiveness analysis
  - Extended cost-effectiveness analysis
  - Evidence-based, transparent processes

References

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- Norheim OF. Ethical priority setting for universal health coverage: challenges in deciding upon fair distribution of health services. BMC Medicine. 2016 May 11;14:75.
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- Smith PC, Chalkidou K. Should Countries Set an Explicit Health Benefits Package? The Case of the English National Health Service. Value Health. 2017;20(1):60-6.
- Chalkidou K, Culyer AJ. Making Choices on the Journey to Universal Health Care Coverage: From Advocacy to Analysis. Value Health. 2016;19(8):910-2.
- Chalkidou K, Marten R, Cutler D, Culyer T, Smith R, Teerawattananon Y, et al. Health technology assessment in universal health coverage. Lancet. 2013;382(9910):e48-9.
- Glassman, A., U. Giedion, and P.C. Smith, eds. 2017. What's in, what's out? Designing benefits for universal health coverage. Washington DC: Center for Global Development.

The Building of a Foundation: Ghana's Priority-Setting Process

Dr Brian Adu Asare

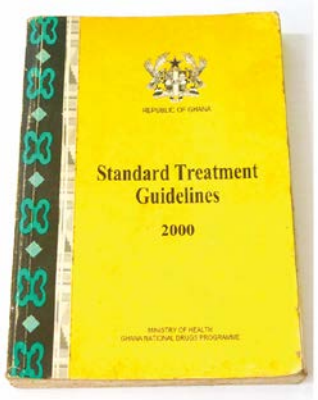
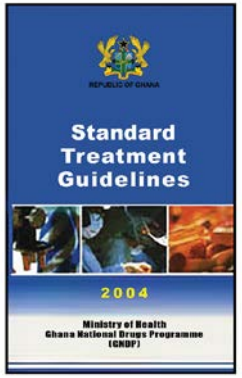
Ghana HTA Technical Coordinator,

Ministry of Health

Content

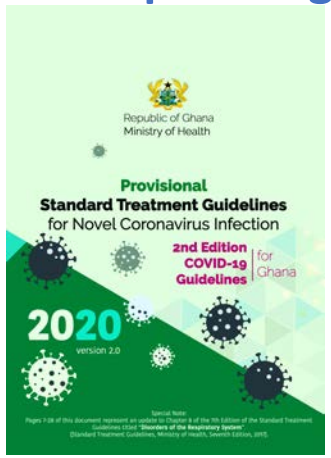
- The history and development of the Ghanaian priority-setting process and corresponding guidelines
- Understand the catalysts, stakeholders, and considerations pushing the process creation forward
- Explore the application of the priority-setting process to an HTA research or topic selection cycle

The history and development of the Ghanaian priority-setting process and corresponding guidelines

1988	1993	1996	2000	2004	2010	2017
Essential Drugs List & National Formulary with Therapeutic Guidelines, 1st Edition, 1988	Essential Drugs List & National Formulary with Therapeutic Guidelines, 2nd Edition, 1993	Essential Drugs List & National Formulary with Therapeutic Guidelines, 3rd Edition, 1996	 4th Edition	 5th Edition	 6th Edition	 7th Edition
			Essential Medicines List, 4th edition, 2000	Essential Medicines List, 5th edition, 2004	Essential Medicines List, 6th edition, 2010	Essential Medicines List, 7th edition, 2017

2020

2020 upcoming



Increasing demand for country-led evidence-based context-driven consensus

The history and development of the Ghanaian priority-setting process and corresponding guidelines

2010

6th Edition

Essential Medicines List, 6th edition, 2010

OPEN ACCESS Freely available online

PLOS | MEDICINE

Health in Action

Integrating Global and National Knowledge to Select Medicines for Children: The Ghana National Drugs Programme

David Sinclair[1]*, Martha Gyansa-Lutterodt[2], Brian Asare[2], Augustina Koduah[2], Edith Andrews[3], Paul Garner[1]

1 Liverpool School of Tropical Medicine, Liverpool, United Kingdom, 2 Ghana National Drugs Programme, Accra, Ghana, 3 World Health Organization, Accra, Ghana

Training with Development of evidence summaries; GRADEing evidence; with child health as well as other priority areas
-> Chlorhexidine for cord care, artesunate for severe malaria, amoxicillin DT, etc.

World Health Organization

WHO, under the Bill and Melinda Gates Foundation funded Better Medicines for Children Project in Ghana

established evidence summaries as part of national medicines selection, guidelines processes and recommendations for reimbursement

The history and development of the Ghanaian priority-setting process and corresponding guidelines

2016-2017

11 key recommendations on institutionalization of HTA in Ghana, which informed the Ghana HTA strategy version 1.0

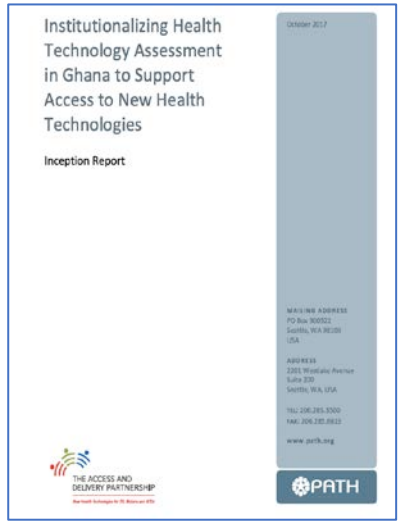
- Develop strategic and operational plans
- Promote and leverage Hypertension Case Study
- Establish HTA Unit within the MOH and support it
- Reconstitute HTA-WG as HTA Steering Group (SG) and HTA Technical Working Group (TWG)
- TWG to start with guidelines and then reference case
- Build capacity
- Clarify extent of legislative amendment required
- Cost recovery mechanism to support evaluation
- Seek impact on procurement, pricing, reimbursement, EML, STG

THE ACCESS AND DELIVERY PARTNERSHIP
New Health Technologies for TB, Malaria and NTDs

PATH

Institutionalizing Health Technology Assessment in Ghana to Support Access to New Health Technologies

October 2017



The history and development of the Ghanaian priority-setting process and corresponding guidelines

2017

7th Edition

Essential Medicines List, 7th edition, 2017

Economic Evaluation

Supporting the Development of Evidence-Informed Policy Options: An Economic Evaluation of Hypertension Management in Ghana

Mohamed Gad, MD, MA,[1,*] Johanne Lord, BSc, MSc, PhD,[2] Kalipso Chalkidou, MD, PhD,[1] Brian Asare, Pharm D,[3] Martha Gyansa Lutterodt, BPharm, MA, MPSGH,[4] Francis Ruiz, BSc, MSc[1]

[1]Global Health Development group, School of Public Health, Imperial College London, International Decision Support Initiative, London, England, UK; [2]Southampton Health Technology Assessments Centre, University of Southampton, Southampton, England, UK; [3]Ghana National Drugs Programme, Ministry of Health, Accra, Ghana; [4]Pharmaceutical Services, Ministry of Health, Accra, Ghana.

Development of hypertension HTA model for Ghana informing hypertension treatment in the STG and EML. Improved treatment algorithm prioritizing calcium channel blockers and diuretics for newly diagnosed uncomplicated cases

iDSI

Project-based HTA with technical support from iDSI

HTA conducted and implemented without country structures. The challenging path is establishing structures and using the structures to produce and use HTA.

The history and development of the Ghanaian priority-setting process and corresponding guidelines

2019 2020

- Capacity Building Plan integrated with Technical Work in a **learn-by-doing approach**
- Technical assistance from NIPH in collaboration with the University of Ghana to the HTA Technical Working Group and HTA Secretariat.

NIPH
Norwegian Institute of Public Health

Capacity building starting with a skills gap assessment

Short, Medium to Long term relationships on capacity building

HTA capacity building

The history and development of the Ghanaian priority-setting process and corresponding guidelines

2018 2019

- Capacity Building Plan on HTA and related topics
- HTA training HITAP in collaboration with iDSI National University of Singapore
- HTA related training in Vaccinology, India

HITAP International Unit

Alliances

Beginning the actual challenging process

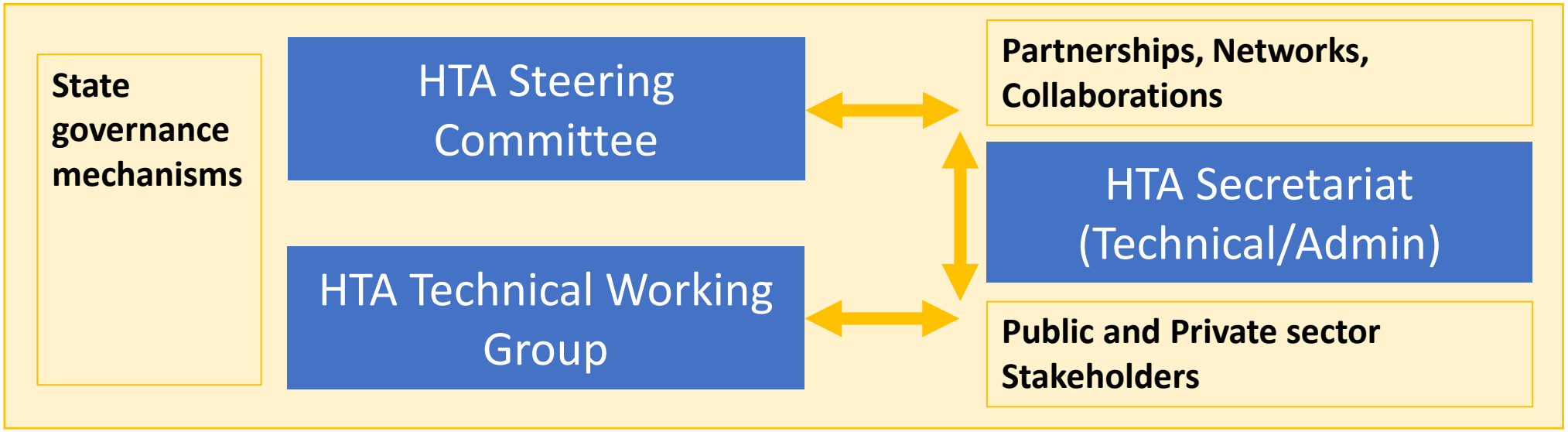
2019

The Structures for Institutionalization

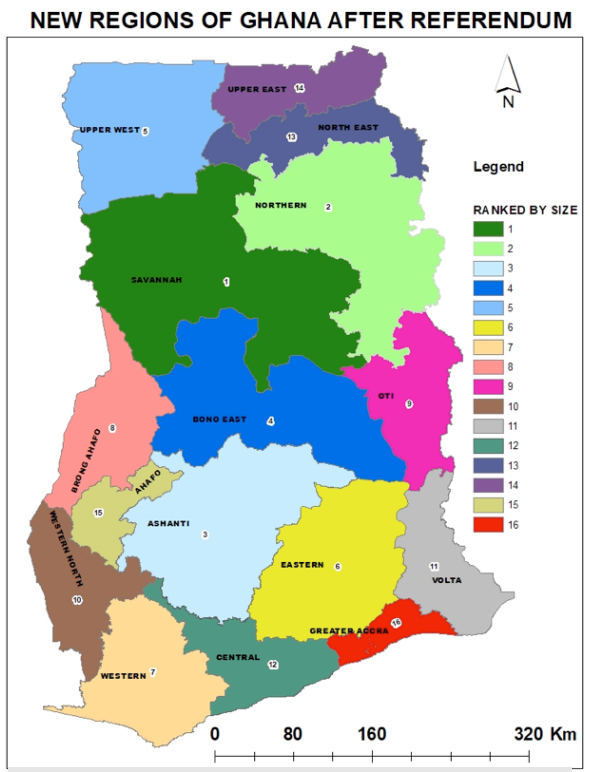
2019

HTA Country Structures include

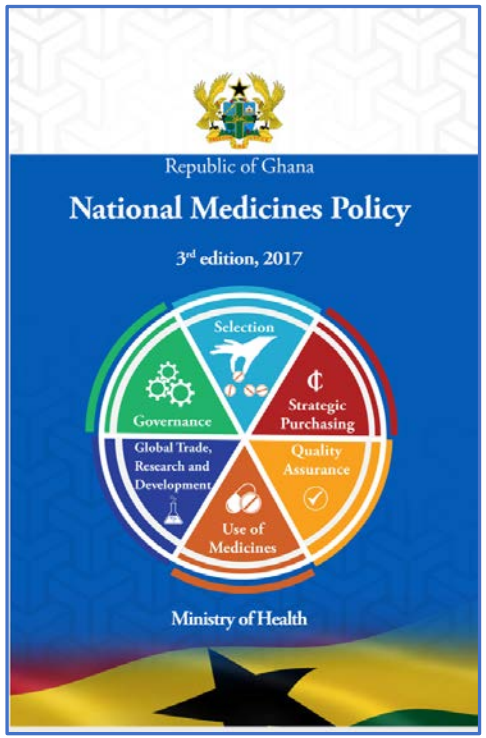
- HTA Steering Committee (Responsible for governance functions)
- HTA Technical Working Group (Responsible for technical functions)
- HTA Secretariat (Responsible for coordination, assistance, and process management)



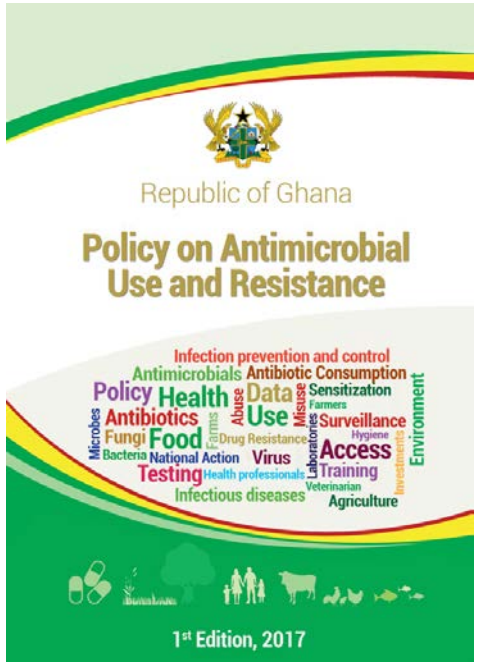
The context



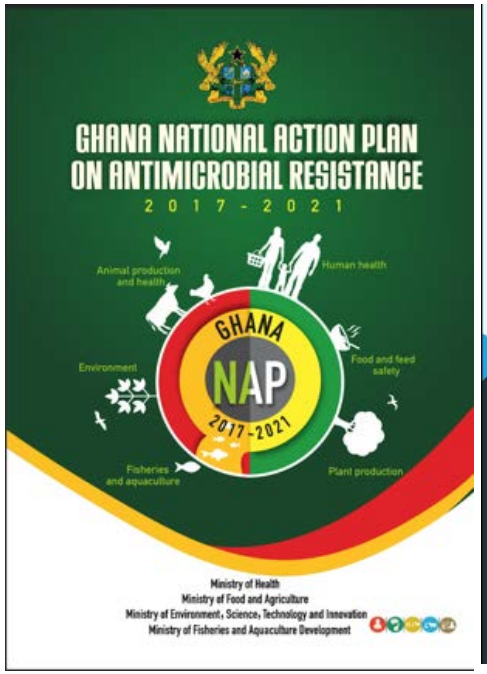
New geo-political regions with requirements for prioritization of health infrastructure and services



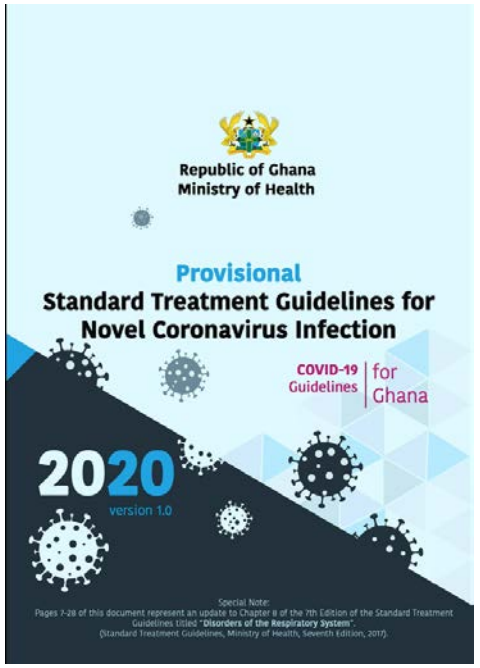
Medicines policy with clear direction for HTA with linkages to pricing, procurement, financing, UHC



AMR policy building an economic case for investments into AMR

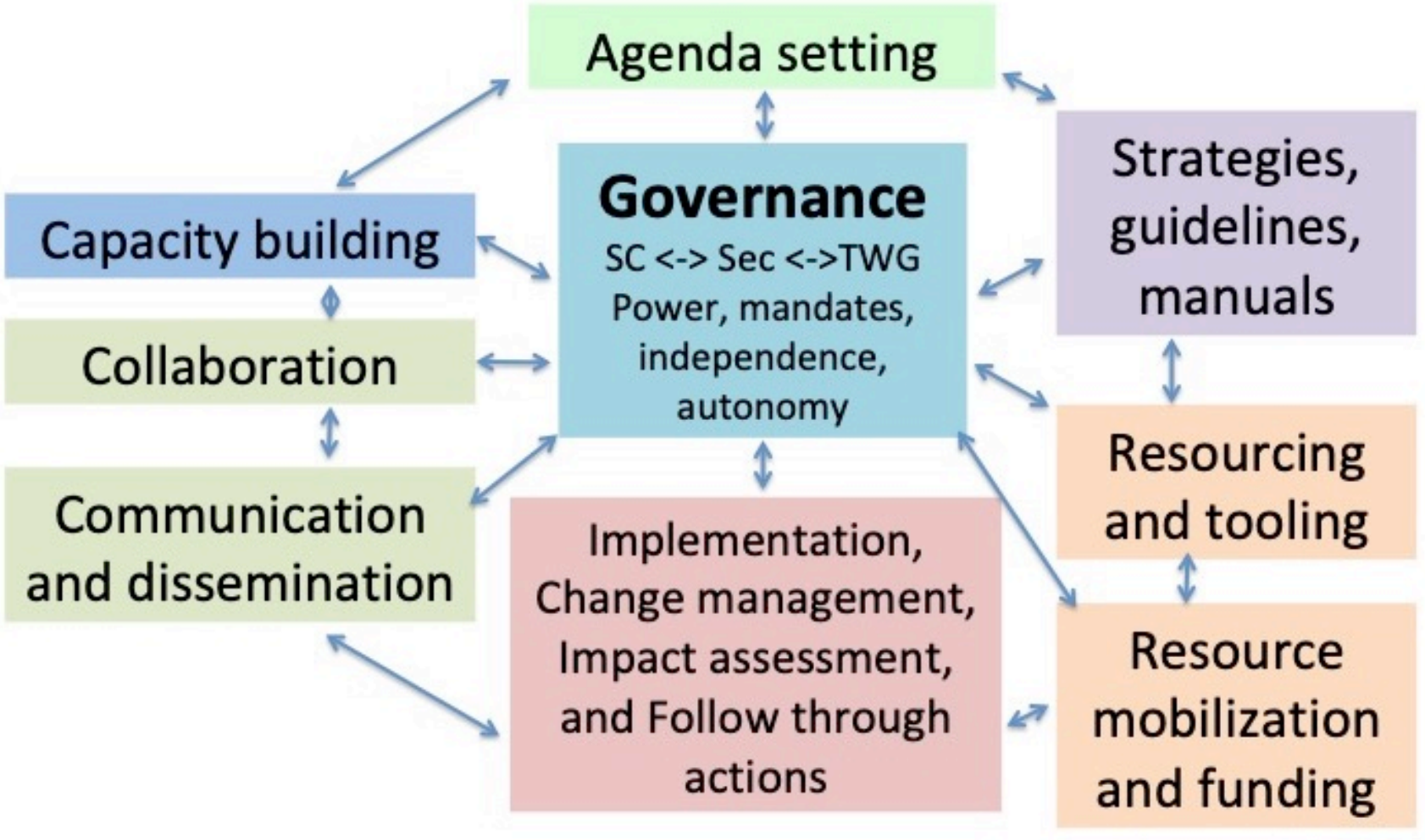


AMR NAP requiring 21 mill USD for 5 years

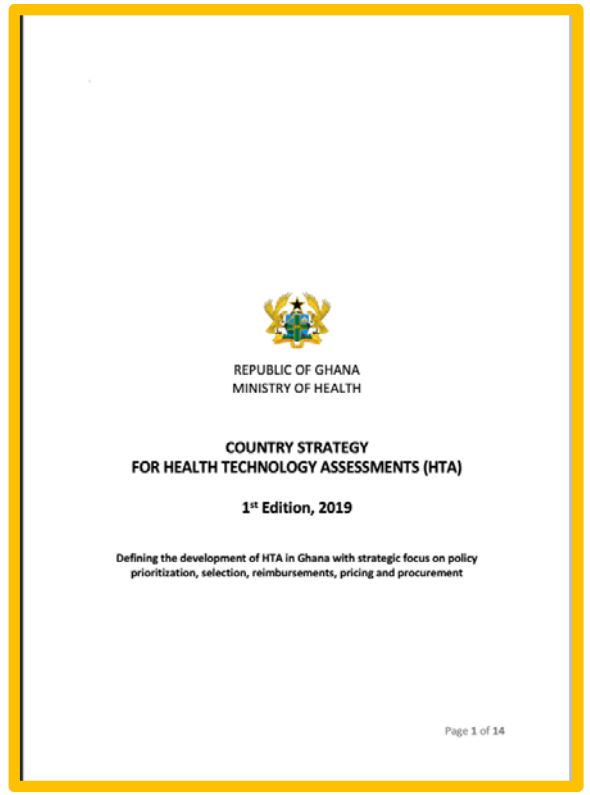


Emergency response to emerging diseases with budget shocks and a need for comprehensive system response

Ghana HTA strategy version 1.0



- Ghana HTA Country Strategy, 1st edition 2019



REPUBLIC OF GHANA
MINISTRY OF HEALTH

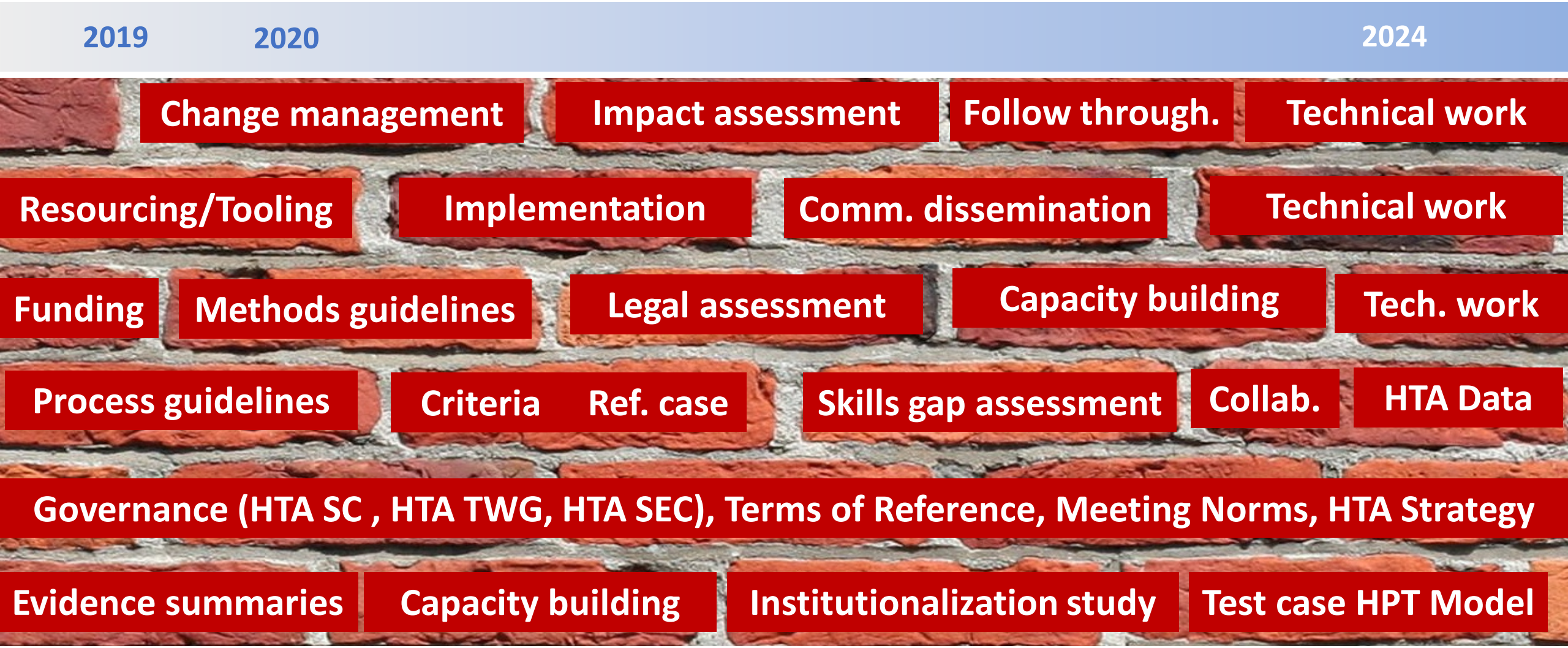
COUNTRY STRATEGY
FOR HEALTH TECHNOLOGY ASSESSMENTS (HTA)

1st Edition, 2019

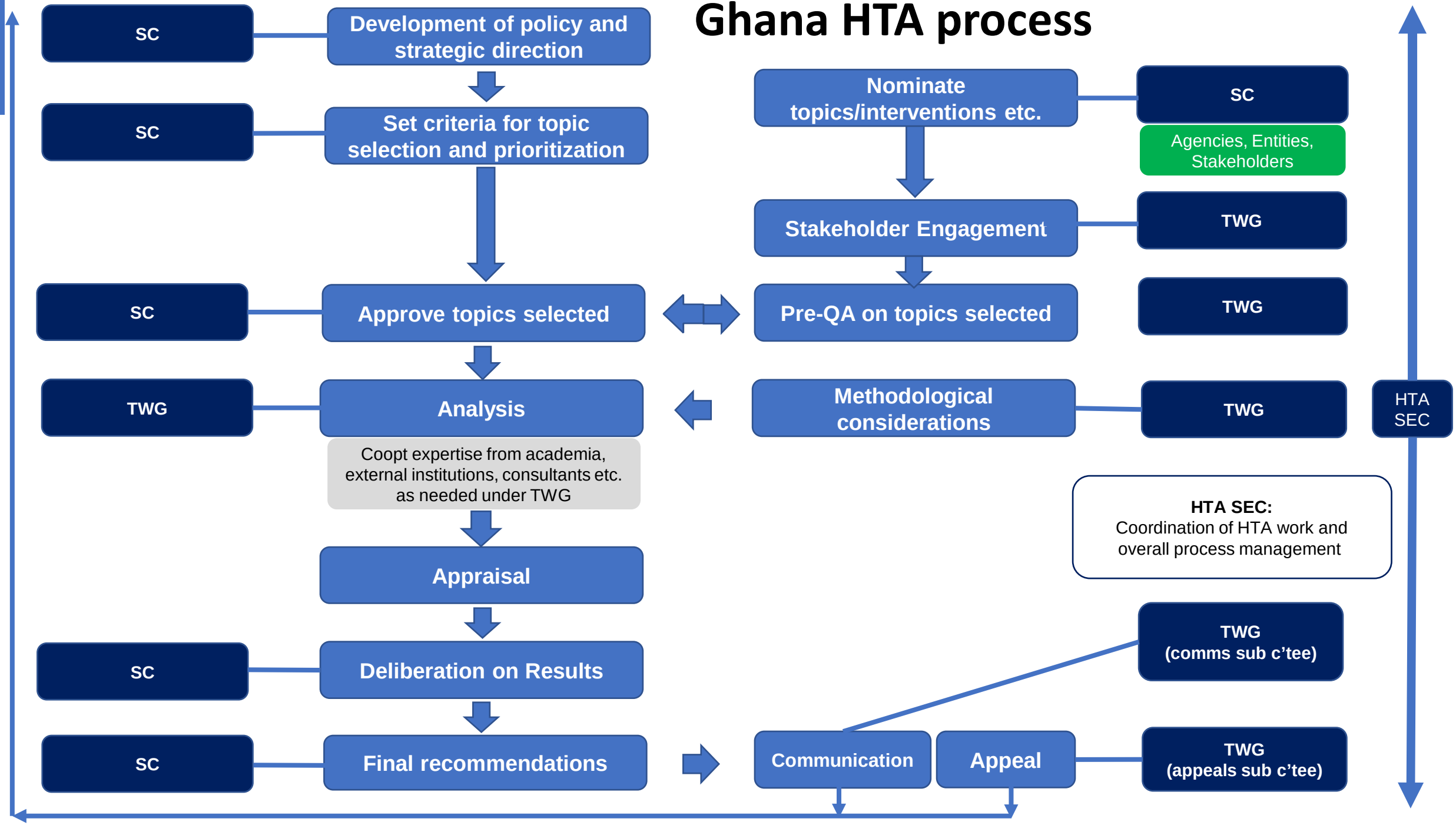
Defining the development of HTA in Ghana with strategic focus on policy prioritization, selection, reimbursements, pricing and procurement

Page 1 of 14

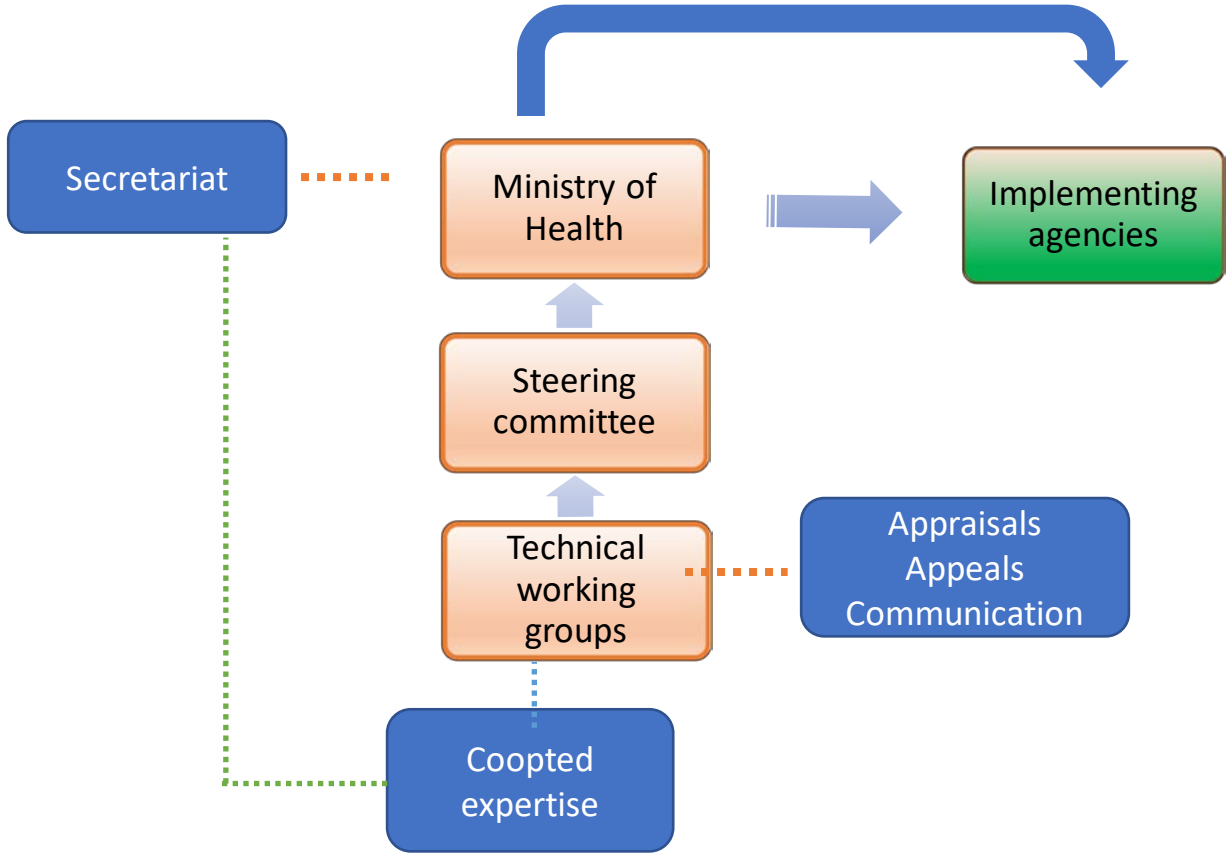
HTA strategy implementation – building a foundation



Ghana HTA process



Organisational structure for decision making



A Establish advisory committee

B Identification of decision criteria

C Identification of services for evaluation

D 1 Scoping
2 Assessment
3 Appraisal
} for every service

E Communication and appeal

F Monitoring and evaluation

Following an Evidence Deliberative Process (EDPs)

Source: Oortwijn W, Jansen M, Baltussen R. Evidence-informed deliberative processes. A practical guide for HTA agencies to enhance legitimate decision-making. Version 1.0. Nijmegen, Radboud university medical centre, Radboud Institute for Health Sciences, 2019.

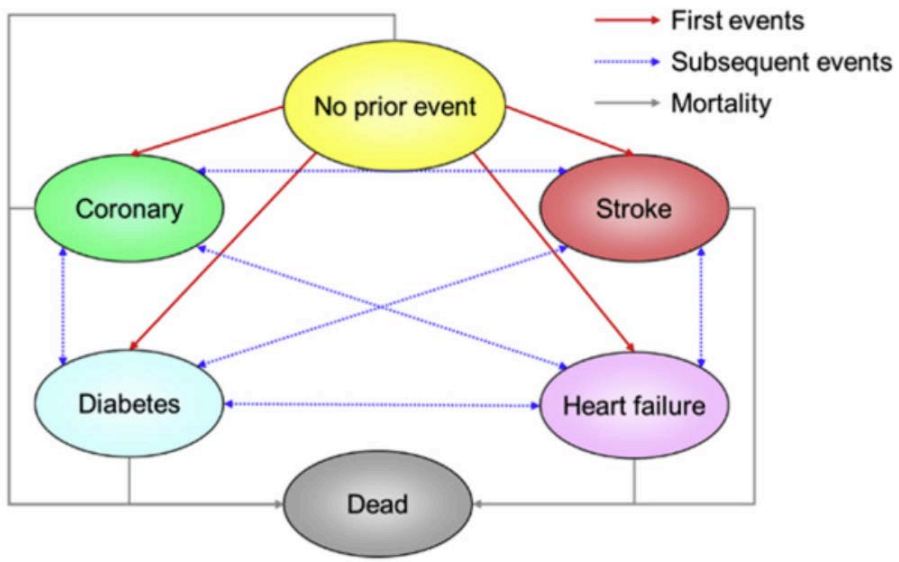
The Case for Hypertension

- To estimate the cost-effectiveness of drugs to reduce blood pressure to prevent cardiovascular disease (CVD)
- **Population -** Patients with hypertension, excluding those with pre-existing CVD or diabetes, and pregnant women
- **Interventions** - First line drugs (main classes):
    A. ACE inhibitors or ARB
    B. Beta-blockers
    C. Calcium Channel Blockers
    D. Thiazide-like Diuretics
- **Comparator -** No intervention (NI)
- **Outcomes** – Coronary Heart Disease (Heart attack), Stroke, Heart Failure, Diabetes, Disability Adjusted Life Years (DALYs) and costs

1. Disease burden
2. Cost driver to the NHIS

Model structure and data sources

Figure 1. Structure of the hypertension core treatment model.



Parameters	Sources
Cost of blood pressure lowering drugs	Ghanaian prices, assumes use of cheapest drug in class at STG dose (median when range given)
Cost of coronary, stroke, heart failure and diabetes	DRG for inpatient admission, plus follow up visits, tests and drugs at NHIA tariffs. Assumes 50% of patients access services
DALYs lost	WHO Global Burden of Disease 2010 (weights from 2004)
Mortality rates by age	WHO Global Health Observatory data repository, Ghana 2013
Effect of drug classes	Reduced blood pressure for black patients (Brewster 2004). Relative risks of outcomes from meta-analysis of clinical trials (Ettehad et al 2016)

Results

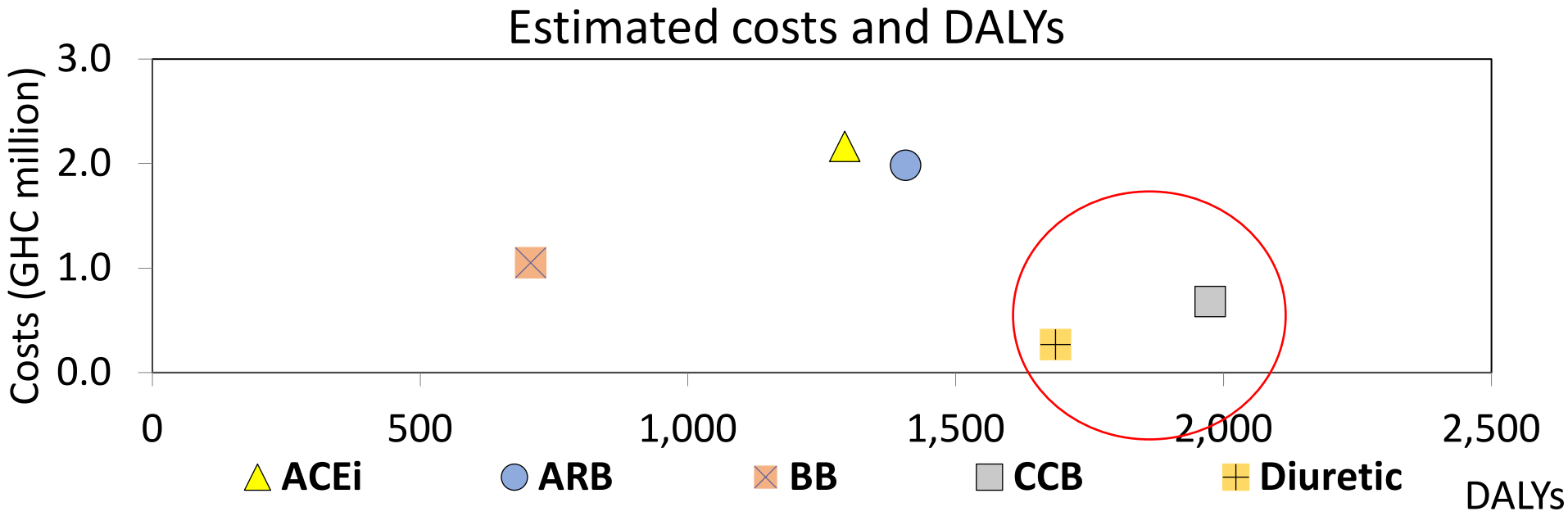


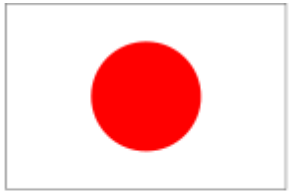
Table 2. Incremental cost-effectiveness analysis: per 1000 treated population.

	Total		Incremental (compared with no intervention)		ICER (compared with next best alternative)	
	Cost (GH¢)	DALYs	Cost (GH¢)	DALYs avoided	ICER (GH¢ per DALY avoided)	
NI	536 562	13 447	—	—	—	
TZD	827 495	12 394	290 933	1052	276	vs NI
CCB	6 034 688	1523	5 498 126	1523	11 061	vs TZD
ACEi	5 383 737	690	4 847 175	690	Dominated	
ARB	3 934 709	416	3 398 147	416	Dominated	
BB	1 871 136	202	1 334 573	202	Dominated	

ACEi indicates angiotension converting enzyme inhibitor; ARB, angiotension receptor blocker; BB, beta-blockers; CCB, calcium channel blockers; DALYs, disability-adjusted life-years; GH¢, Ghana cedis; ICER, incremental cost-effectiveness ratio; NI, no intervention; TZD, thiazide-like diuretics.

Acknowledgements

HTA institutionalisation in Ghana has been a cumulative process with contributions from key partners playing major roles and offering various kinds and levels of support in the interest of Ghana



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Thank you

Politics, Priorities, and Institutions

HITAP Seminar Identification and Prioritization of Health Technologies

9 September 2020

Jesse B. Bump, PhD, MPH
Department of Global Health and Population
Harvard T.H. Chan School of Public Health
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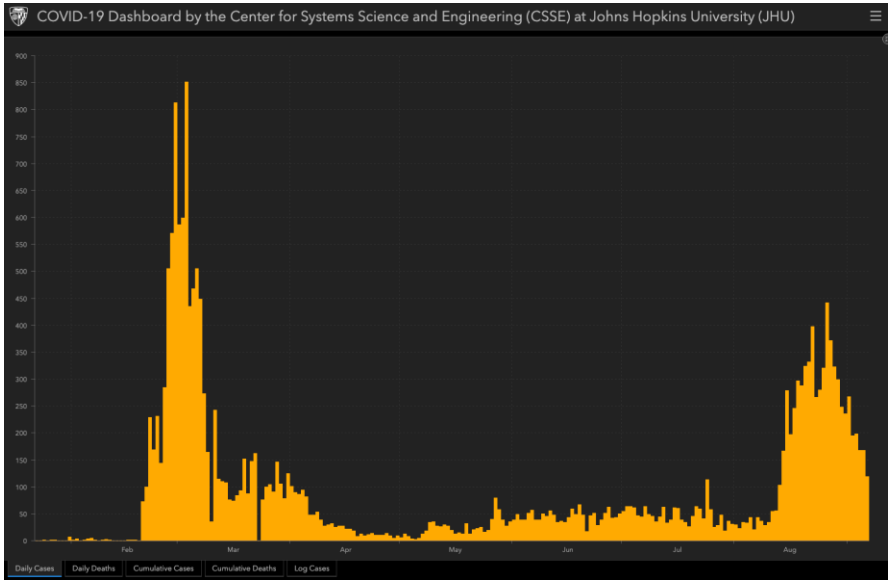
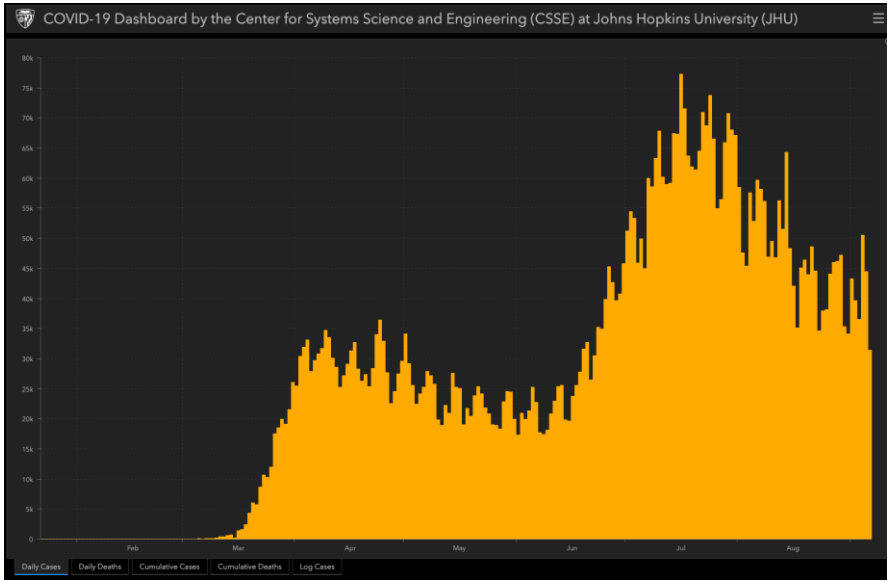
Agenda

- Part I: National Performance = National Political Economy = National Priority Setting
- Part II: Improving Priority Setting = Managing Political Economy Processes
- Part III: The political imperative of priority setting institutions

Part I: National Performance



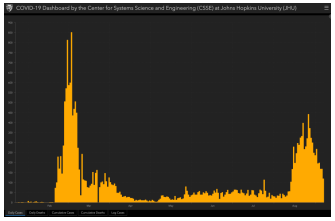


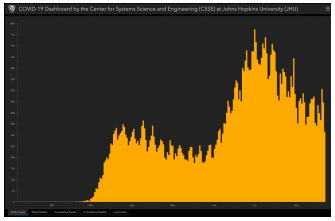
S. Korea: 21,432 cases; 341 fatalities (pop. ~51M)
USA: 6.3M cases; 189K fatalities (pop. ~330M)

Source: JHU CSSE, 7 Sept 2020 9:29PM update

Part I: National Performance

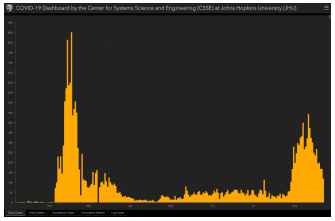
- Political economy means:
  - Balance of states, markets, and rights
  - Distributional issues (who gets what)
  - Contests of interest (power)
- Loosely understood via GNI/capita
- Probably, COVID performance is more revealing

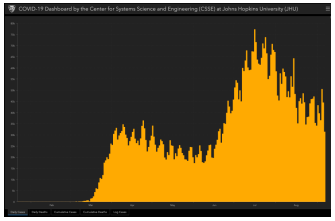




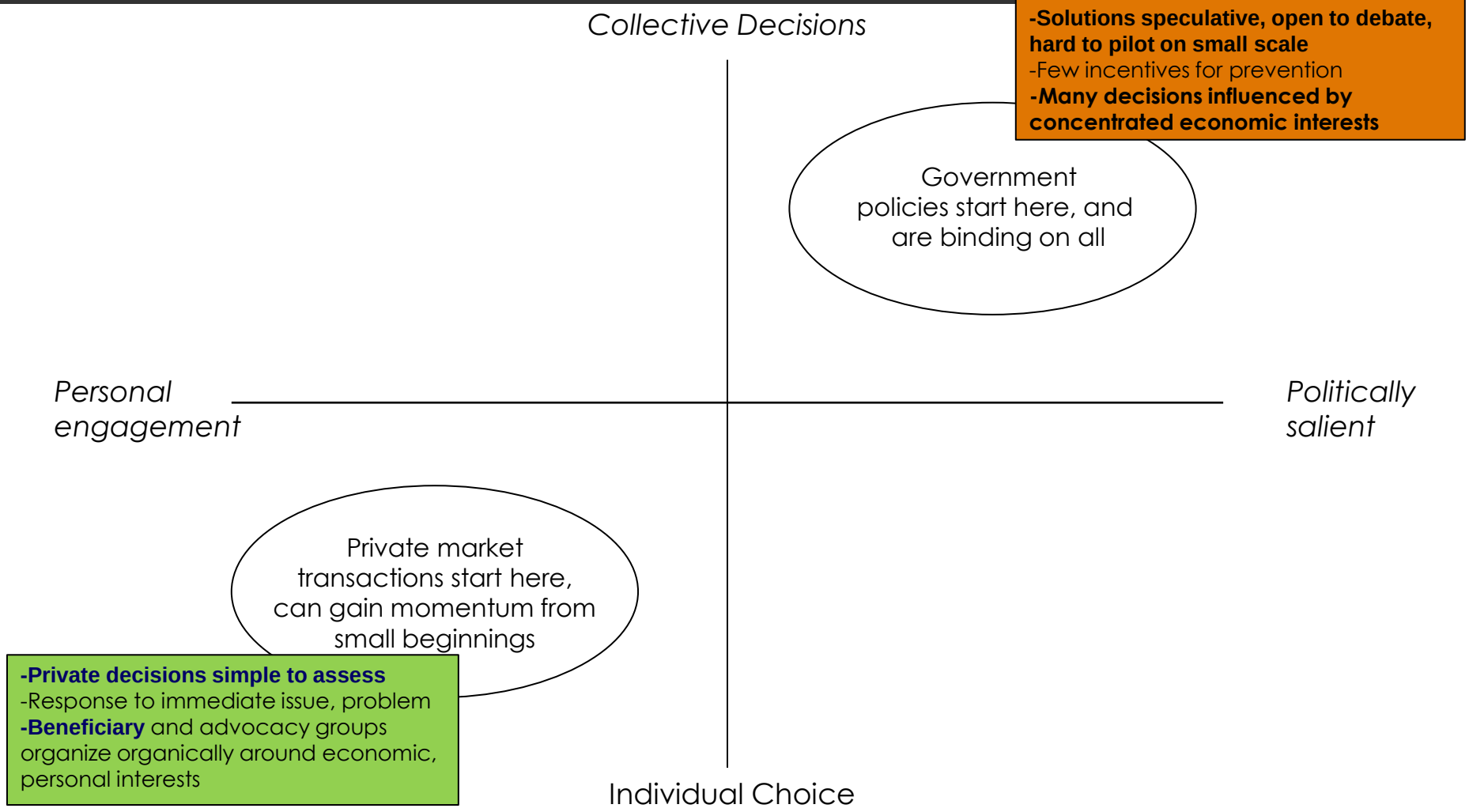
Part I: National Performance

- Performance reveals priorities
  - Individual decision making?
  - Social cohesion?
  - Personal liberties?
  - Collective safety?
  - Public health expert opinion?
  - Evidence and argument of other origin?
- Priority setting process may be unclear at this scale, but outcomes are revealed



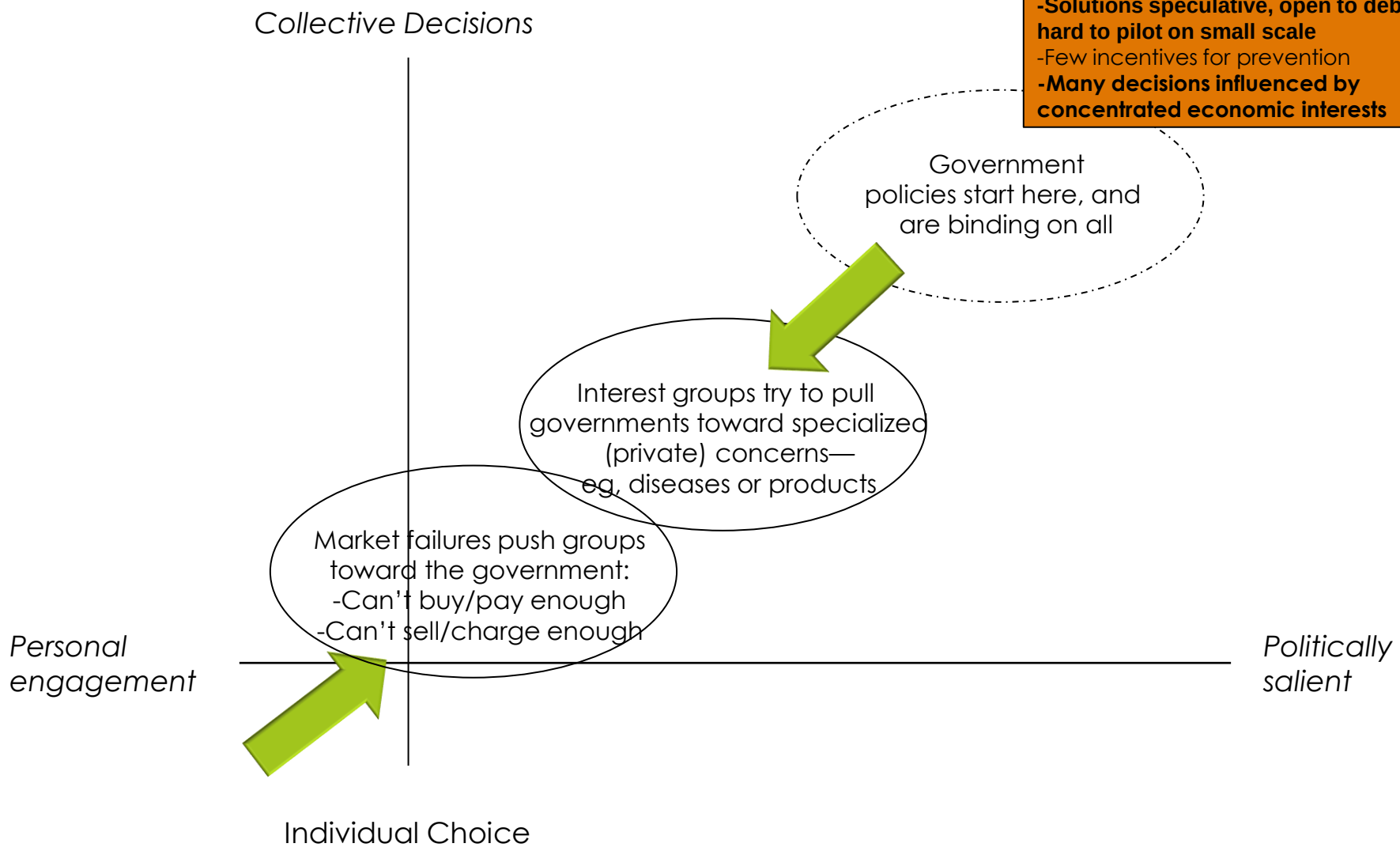


Priority Setting by Decision Mechanism



Priority Setting Political Economy, base state

-Public decisions can be made, BUT:
-Problems diffuse
-Solutions speculative, open to debate, hard to pilot on small scale
-Few incentives for prevention
-Many decisions influenced by concentrated economic interests

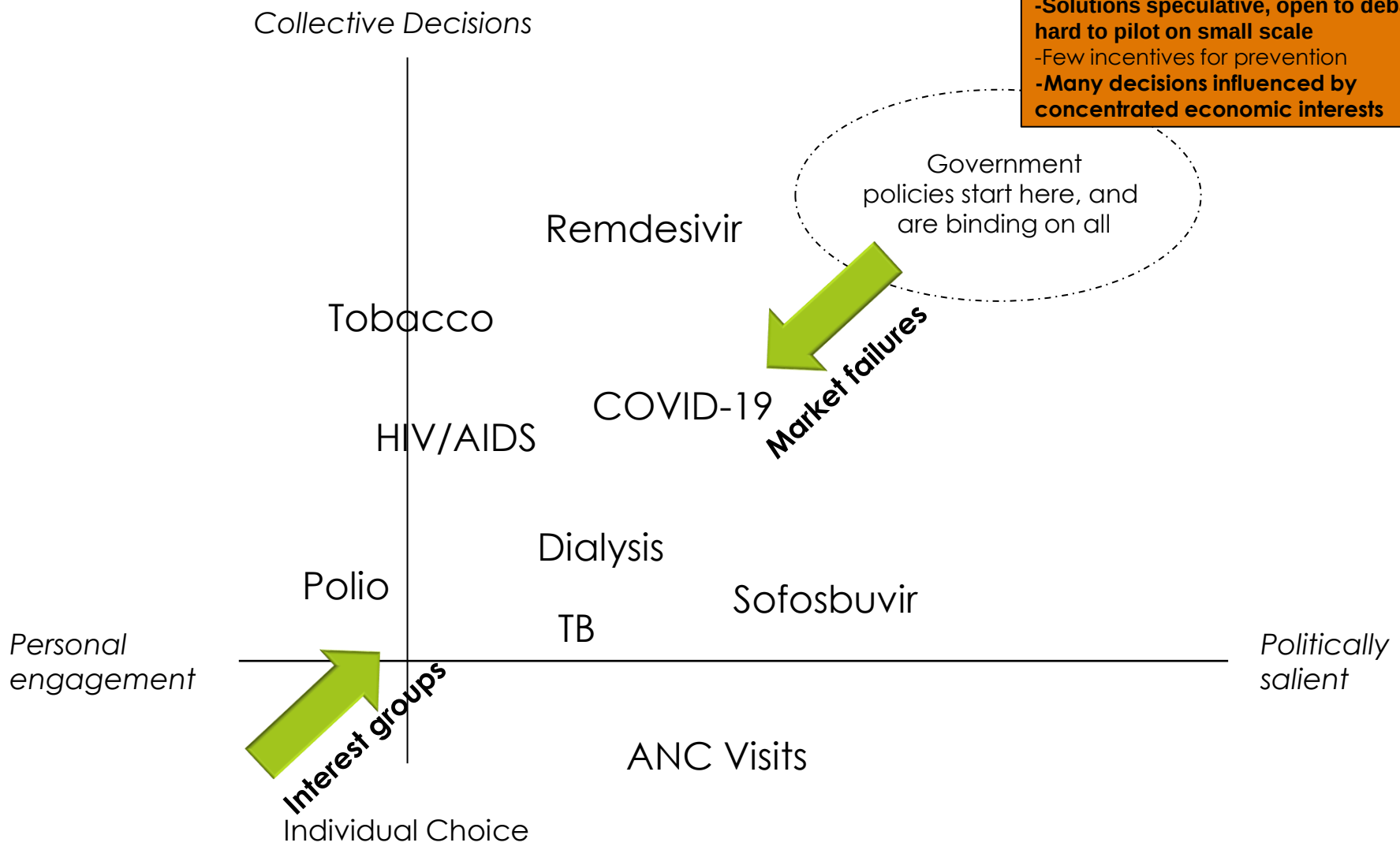


PS PE, Part 1 has problems

- Priorities set by the PE of the nation; ie in many cases:
  - Dominated by stronger players
    - Richer
    - Greater political resources
  - Creates and/or increases inequalities
- Subject to market failure
  - Cannot redistribute to the marginalized
  - Cannot regulate itself
  - Cannot optimize across a whole population
  - Cannot function according to need or benefits—just power

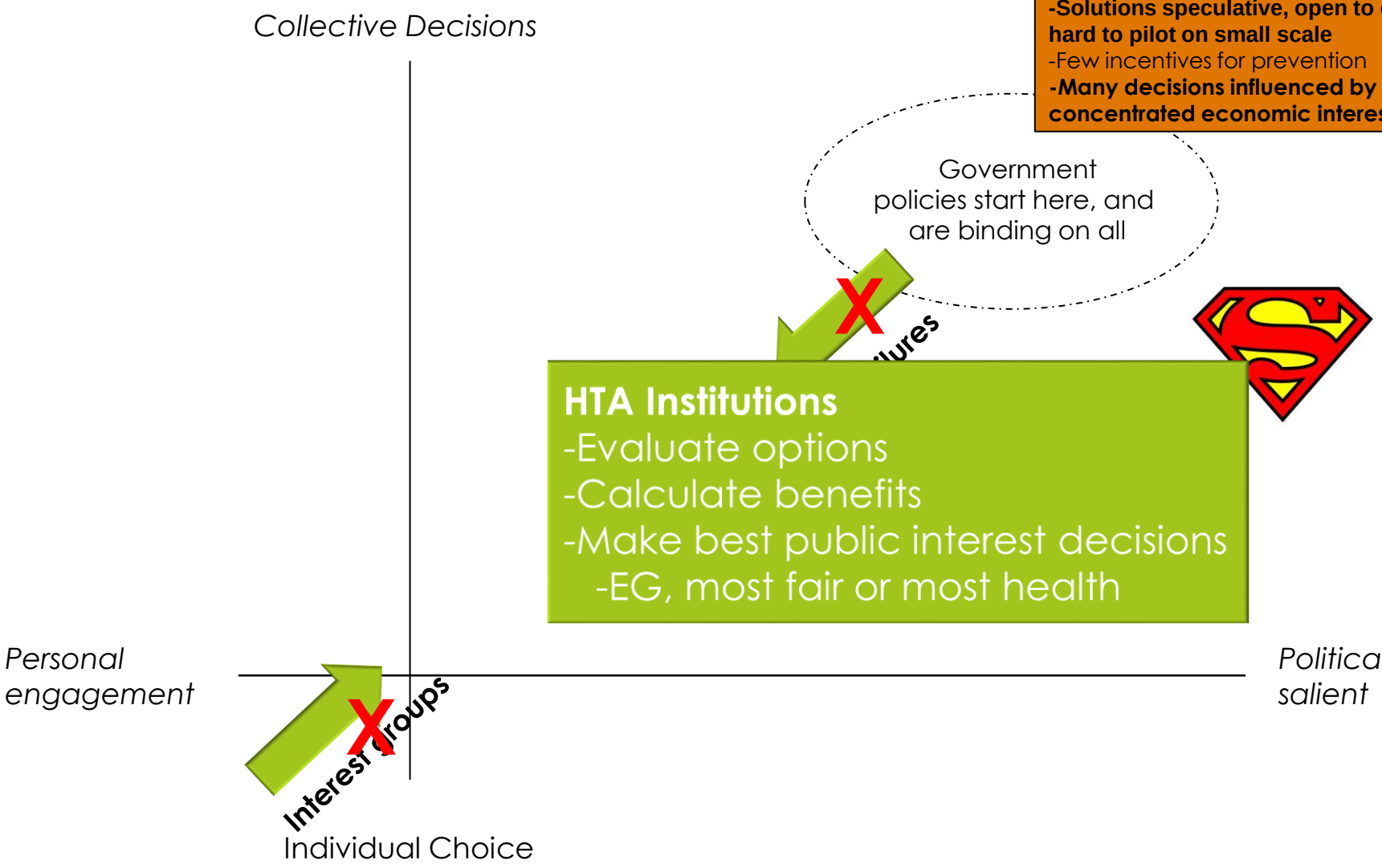
Part II: Priority Setting as Managing Political Economy

-Public decisions can be made, BUT:
-Problems diffuse
-Solutions speculative, open to debate, hard to pilot on small scale
-Few incentives for prevention
-Many decisions influenced by concentrated economic interests



Part II: Priority Setting with HTA as Political Economy Super Hero

-Public decisions can be made, BUT:
-Problems diffuse
-Solutions speculative, open to debate, hard to pilot on small scale
-Few incentives for prevention
-Many decisions influenced by concentrated economic interests



HTA or PS Institutions, usual concept

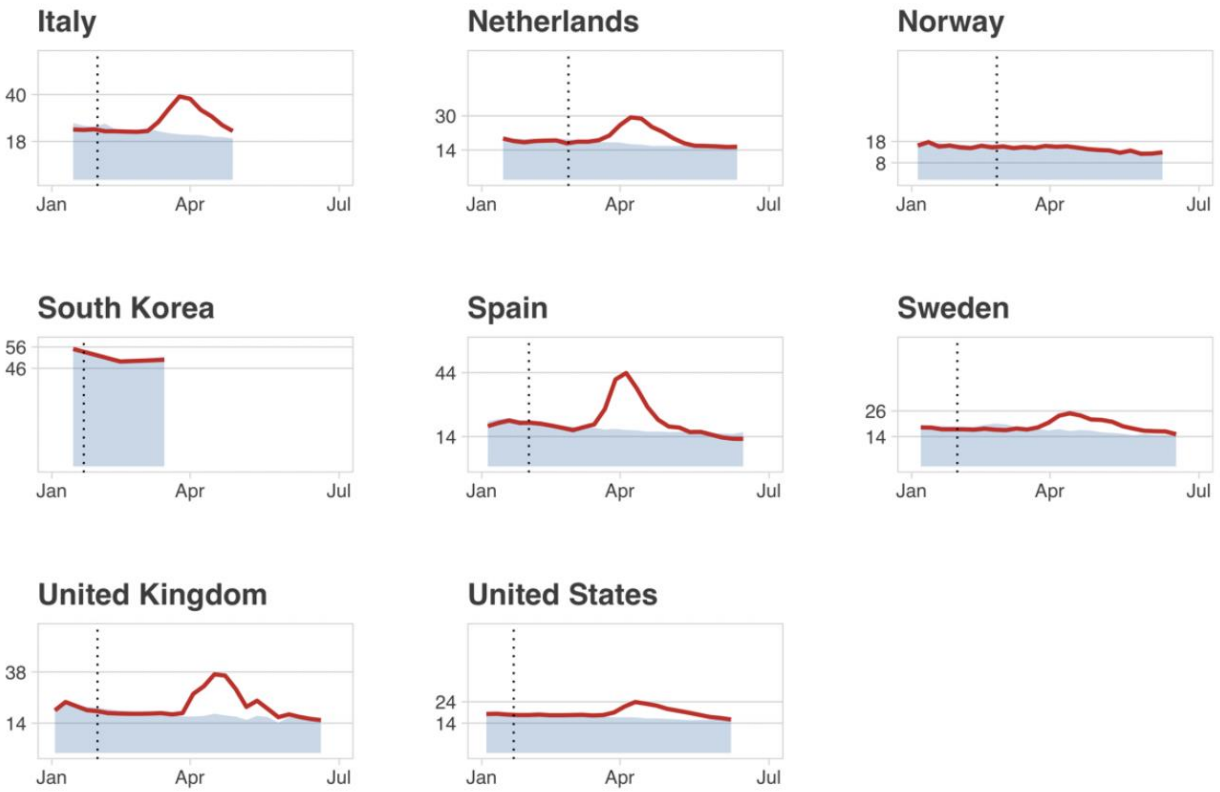
- Evaluate technologies, interventions, or services
  - Calculate costs and benefits
    - ECEA
  - Provide advice to government
    - Definitive
      - Best buys, wasted buys
    - Parametric
      - Depends on context, objectives
- Health Benefit Package Design

HTA or PS Institutions, usual concept

- ”Reason will prevail”
  - Technical excellence
  - Transparency
  - Independence

Excess (COVID) Deaths/capita

- Reason does not always win
- Priorities may not include health, or fairness, or risk protection



Joint work with Sarah Bolongaita and Stephane Verguet

Part III: PS Institutions' Political Imperative

- Even in reasonable countries, MAIN function is to manage politics
  - "non-partisan" is actually political
  - "transparency" is a tool of influence
  - Technical sophistication is influential only by political agreement

Part III: PS Institutions' Political Imperative

- Managing politics via PS Institutions must be taken seriously
- ECEA = Enhanced Constituency Engagement Analysis
  - Promote transparency, fairness, risk protection as societal values
  - Consider relationships with other institutions
    - Courts: Litigation?
    - Parliament: Testimony or lobbying?
    - Public: Engagement and participation?

Thanks for your participation!

Developing a protocol for allocating scarce critical-care resources during the COVID-19 pandemic in Thailand

Rachel Archer MPH

9th September 2020

The Global Picture

- Countries across the world have faced shortages of critical-care resources *(ICU beds, ventilators, hemodialysis machines and personnel)* when responding to COVID-19.
- Intensive Care Unit (ICU) expansion is challenging.
  - Critical-care resources cannot be procured a short amount of time.
  - Major infrastructure investment is required.
- Countries across Europe and North America have created guidelines for the allocation of finite critical-care resources.
- Explicit guidance can help relieve the burden placed on medical professionals.

The Hardest Questions Doctors May Face: Who Will Be Saved? Who Won't?

As coronavirus infections explode in the U.S., hospitals could be forced to make harrowing choices if pushed to the brink. Planning is already underway.

NewScientist

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Which covid-19 patients will get a ventilator if there's a shortage?

Coronavirus outbreak

Who gets a ventilator? The 'gut-wrenching' choices facing US health workers

Under unprecedented circumstance, and in the absence of federal guidance, hospitals have formed triage committees to guide life-and-death decisions

Opinion **Coronavirus pandemic**

Doctors are being asked to play God

The coronavirus pandemic is presenting hospitals with a terrible choice about whose life to save

Who gets to live? How doctors make impossible decisions as COVID-19 surges

Setting the Scene in Thailand

- At the peak of epidemic in Thailand, between the end of March and early April 2020 *(91 to 188 new cases per day),* the number of available ICU beds in the country had almost depleted.

- The Ministry of Public Health (MOPH) called for the creation of guidelines for critical-care resource allocation that can be applied fairly and consistently across Thailand.

Conditions for Implementation

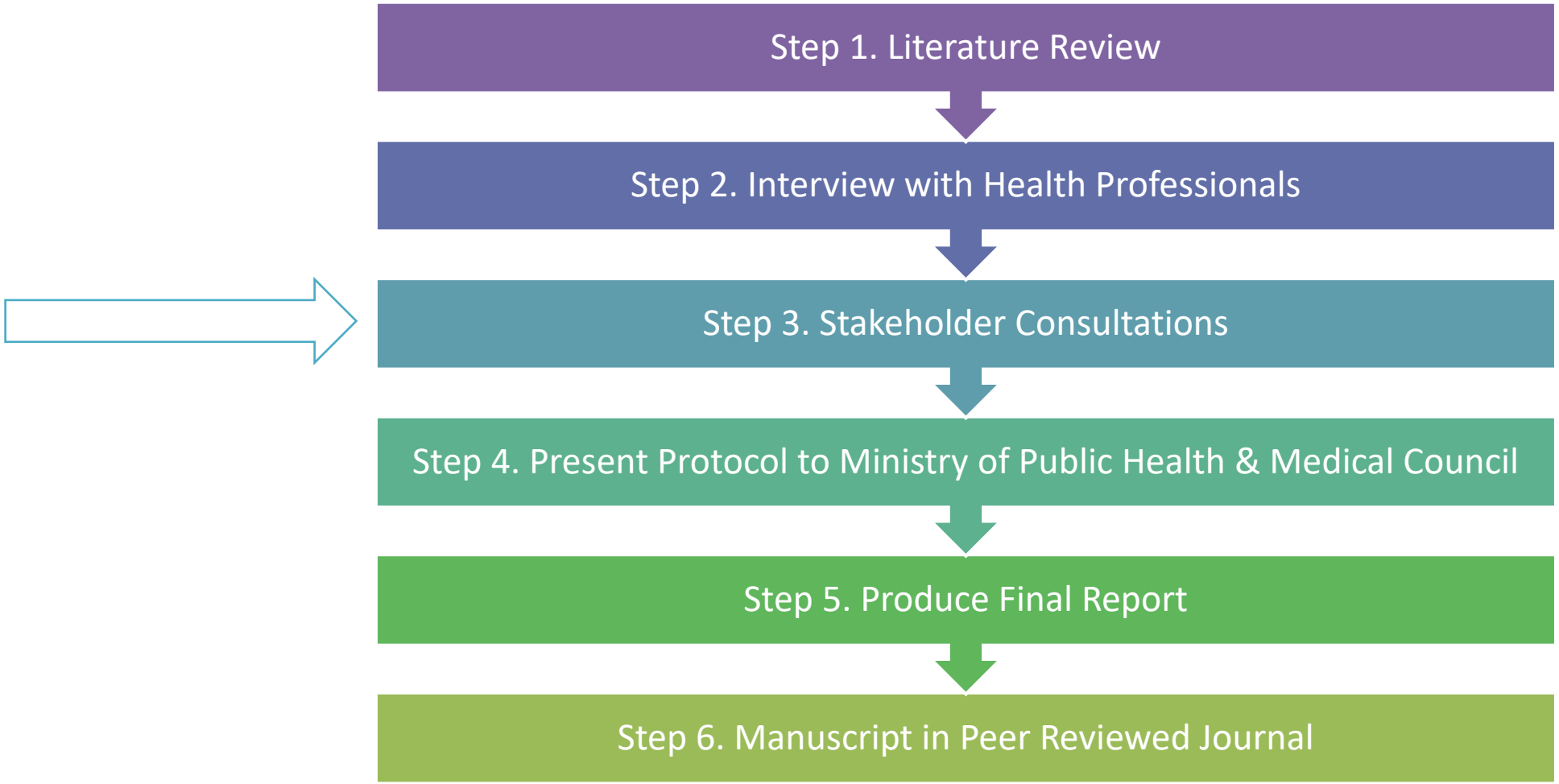
When will this guideline be implemented?

- Thailand Centre for Covid-19 situation Administration (CCSA) declares national public health emergency and
- After exhausting all avenues for resource mobilization, demand for critical care exceeds supply.

Who will this protocol apply to?

- This protocol will be applied to all patients who require critical care resource regardless of Covid-19 infection status.
- Both private and public health facilities.

Protocol Development Process



Stakeholder Consultations

21 stakeholders were thoroughly consulted in two half-day workshops.

	Activities	Participants
Meeting 1	Present the draft protocol and consult stakeholders. In an open-forum style.	Medical and law experts (Physicians, medical council officials and lawyers)
Meeting 2		Policy makers and individuals from the social sector (Anthropologists, policy makers, members of public and religious groups)

Main Features of Thailand's Triage Protocol

Prioritization Criteria

- In the context of scarce critical-care resources, the prioritization of patients should be based on **maximizing societal benefits**.

- Therefore for prioritization, patients should be assessed using objective and measurable criteria for **clinical prognosis**. This criteria should focus on the immediate and short-term survival prospect; no more than a one-year prognosis.

- Use at least 2 of these tools to assess the patient
  - 1.1 Charlson Comorbidity Index[1]
  - 1.2 Sequential Organ Failure Assessment (SOFA)[2]
  - 1.3 Frailty assessment such as Clinical Frailty Scale (CFS)[3]
  - 1.4 Cognitive impairment assessment[4-6]

SOFA score	1	2	3	4
Respiration PaO_2/FiO_2 (mm Hg)	<400	<300	<200 (with respiratory support)	<100 (with respiratory support)
Coagulation 10^{-3}/platelets/mm	<150	<100	<50	<50
Liver Bilirubin mg/dL (μM)	1.2–1.9 (20–32)	2–5.9 (33–101)	6–11.9 (102–204)	>12 (>204)
Cardiovascular Hypotension	MAp < 70 mm Hg	Dopamine ≤ 5[b] or dobutamine (any dose)	Dopamine > 5 or epinephrine ≤0.1 or norepinephrine ≤ 0.1	Dopamine > 15 or epinephrine > 0.1 or norepinephrine > 0.1
CNS Glasgow Coma Score	13–14	10–12	6–9	<6
Renal Creatinine, mg/dL (μM) or urine output	1.2–1.9 (110–170)	2–3.4 (171–299)	3.5–4.9 (300–440) Or <500 mL/d	>5 (>440) or <200 mL/d

Abbreviations: CNS, central nervous system; SOFA, Sequential (Sepsis-Related) Organ Failure Assessment.
[a]Based on Vincent et al[53] and shows the potential values that contribute to the SOFA score.
[b]Catecholamine and adrenergic agents administered for at least 1 hour; doses in μg/kg/min.

Example SOFA Assessment
https://he01.tci-thaijo.org/index.php/BJmed/article/download/138782/103129/

Prioritization Criteria

Each hospital must apply tools consistently across cases.

When the first two tools provide an equal score, use the third and fourth tool for additional assessment.

‘Number of life years saved’ and ‘Social utility’ were presented to the stakeholders as possible tie breaker criteria but they were disregarded.

Those charged with triage should perform a relative comparison of the scores of the candidates for prioritization. A cut-off score should not be used.

Decision-making Process

Attending Physician

- The literature recommends that the attending physician(s) should not have to decide which patient can access live-saving care as this can be mentally distressing.
- However within the Thai legal framework, a decision relating to the treatment of the patient must be made by the attending physician only.

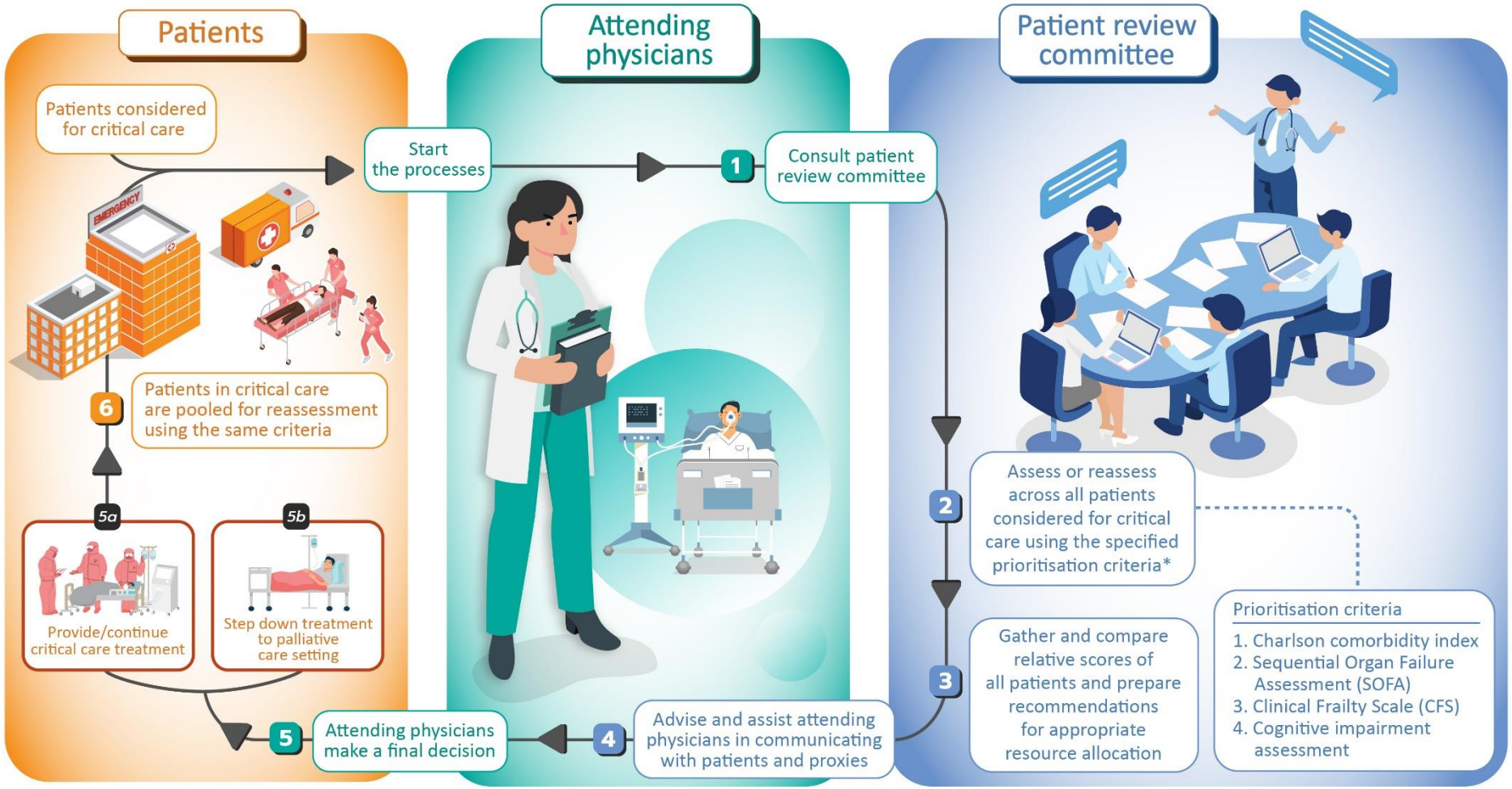
Patient Review Committee

- This committee is responsible for providing consultation to the attending physician and should help communicate the decisions to patients and relatives.
- At least 5 people in the committee consisting of doctors, nurses, social workers, lawyers, or a respected figure in the community.

Timeline for decisions

- Patients must be assessed upon the ICU admission and during the ICU stay.

Flowchart of the sequential decision-making steps from 0 to 6



Implementation

Legal endorsement

- Since mid-April, the COVID-19 situation Thailand has been improving.
- Medical Council and MOPH reluctant to legally endorse the protocol as it is no longer deemed an urgent matter and out of worry for the message it would send to the general public.
- The protocol will be legally endorsed if Thailand have a severe surge of cases beyond the critical resource capacity.

Public engagement

- Extensive communication with the public for accountability, transparency and enhanced understanding.

2 September 2020…

Lessons Learned

Stakeholder and public engagement

Align with local context and legislation

Political and institutional influences

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WEBINAR

KNOWLEDGE EXCHANGE IN THE TIME OF COVID-19

Balancing Trade-Offs

Alia Luz (HITAP)

THE ACCESS AND DELIVERY PARTNERSHIP

UNDP

HITAP Health Intervention and Technology Assessment Program

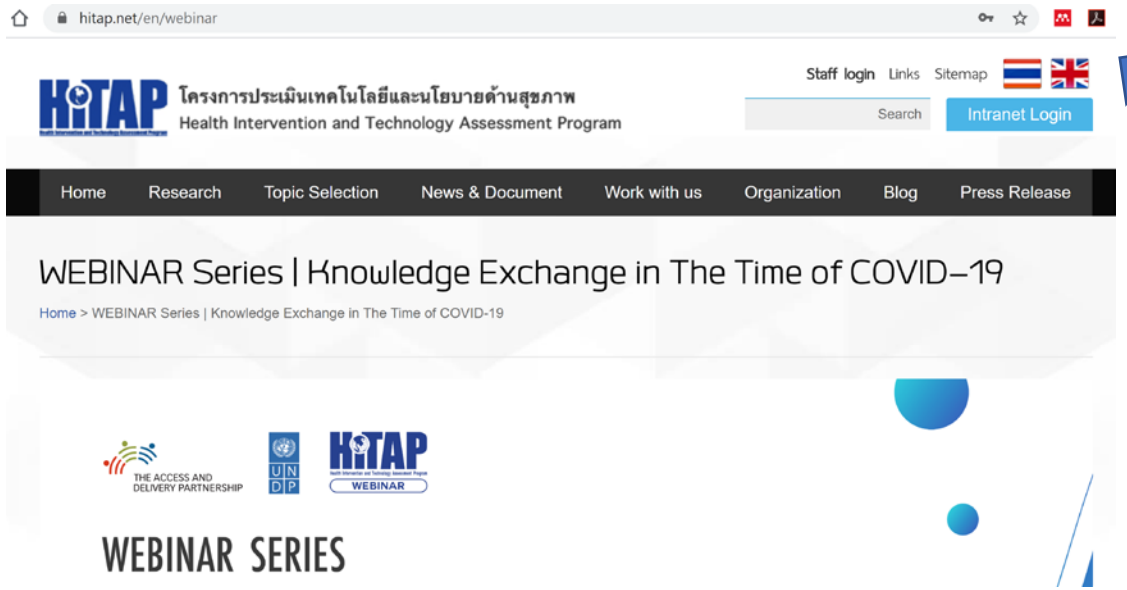
WEBINAR

How to follow along

Option 1: Download exercise from the reminder email sent today, September 9.

Option 2: Download the exercise from the registration website!

Scroll down



Go to:
www.hitap.net/webinar

A vaccine prioritization exercise

Objective:

To understand and appreciate the concepts in the webinar through a hands-on exercise tackling an issue that would likely occur in the real-world.

image: Freepik.com

A vaccine prioritization exercise

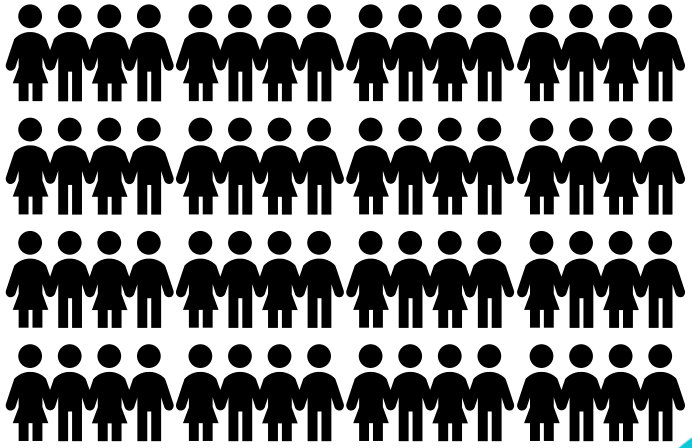
What is the situation?

We need to prioritize vaccines for the coming year.

image: Freepik.com

1. Pentavalent (combined vaccine)
2. Measles vaccine
3. BCG vaccine
4. Pneumococcal conjugate vaccine
5. Rotavirus vaccine

Childhood cohort of 200,000



A vaccine prioritization exercise

Who are you?

A National Immunization Technical Advisory Group (NITAG) member.

What is the issue?

We have a budget limitation of US$4,000,000.

Before we start

We will examine this section in detail ☺

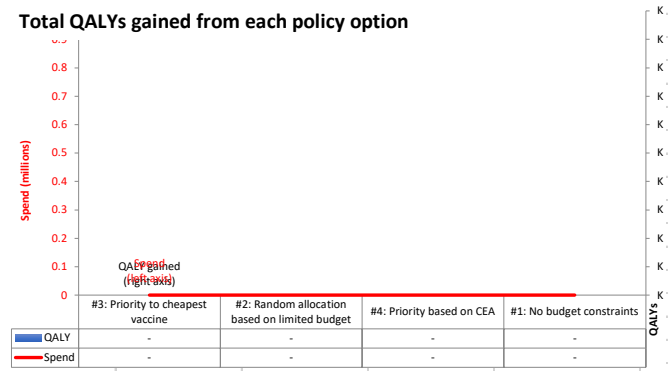
Priority Setting Exercise

#	Vaccine	$ per immunisation	QALYs gained per immunisation	$/QALY gained	#1: Without budget limitation	#2: Random allocation based on limited budget	#3: Based on vaccine price (cheapest) and limited budget	#4: Based on value for money (CEA) and limited budget
1	**Pentavalent**	10	0.50	20	☐		☐	☐
2	**Measles vaccine**	6	0.10	60	☐		☐	☐
3	**BCG vaccine**	4	0.03	120	☐		☐	☐
4	**Pneumococcal**	8	0.08	100	☐		☐	☐
5	**Rotavirus vaccine**	8.5	0.07	120	☐		☐	☐
						0%		

Instruction: Assuming that you are a NITAG member of a country with 200,000 childhood vaccination cohort and limited budget of $4,000,000 per year. There are five vaccines to be considered.

There are four ways to set vaccine priorities. Please follow the vaccine prioritization strategies carefully based on the guidance described at the top of each column in the table above. Next, please examine the bar chart showing total Quality Adjusted Life Years (QALYs) gained and money spent from each resource allocation strategy.

Acknowledgement: this exercise was modified by Yot from the original exercise of the Global Health and Development Group Imperial College London https://www.idsihealth.org/ If you want to use it for other trainings, please kindly contact yot.t@hitap.net



Scenario #1: Full immunisation for all children (without budget constraints)

Total cost per immunised child	0
Total QALY gained per immunised child	-
Cost of full immunisation programme	-
Total QALY gained	-

Total budget available this fisical year	4,000,000
Vaccination cohort (childhood population)	200,000

Scenario #2: Random allocation based on limited budget

Vaccine	% of Budget	Budget in $	Number of children immunized	QALYs gained
Pentavalent	0%	0	0	0
Measles vaccine	0%	0	0	0
BCG vaccine	0%	0	0	0
Pneumococcal conjugate vaccine	0%	0	0	0
Rotavirus vaccine	0%	0	0	0
Total	0%	0	N/A	0

Ways to set priorities

First way:

What if we had all the money (the dream!)?

	Priority Setting Exercise							
#	Vaccine	$ per immunisation	QALYs gained per immunisation	$/QALY gained	#1: Without budget limitation	#2: Random allocation based on limited budget	#3: Based on vaccine price (cheapest) and limited budget	#4: Based on value for money (CEA) and limited budget
1	Pentavalent	10	0.50	2	☐		☐	☐
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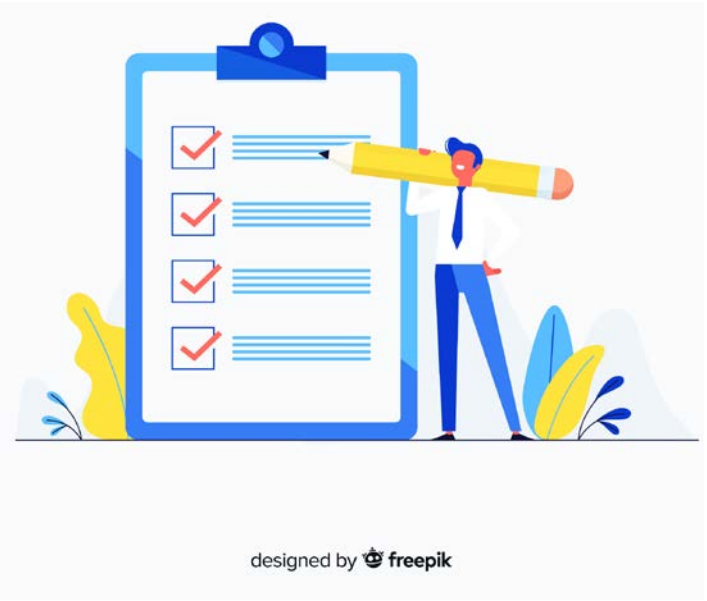
3	BCG vaccine	4	0.03	12	☐		☐	☐
4	Pneumococcal	8	0.08	10	☐		☐	☐
5	Rotavirus vaccine	8.5	0.07	12	☐		☐	☐
						0%		

Ways to set priorities

Second way:

What if allocation was left to our discretion, with no explicit process?



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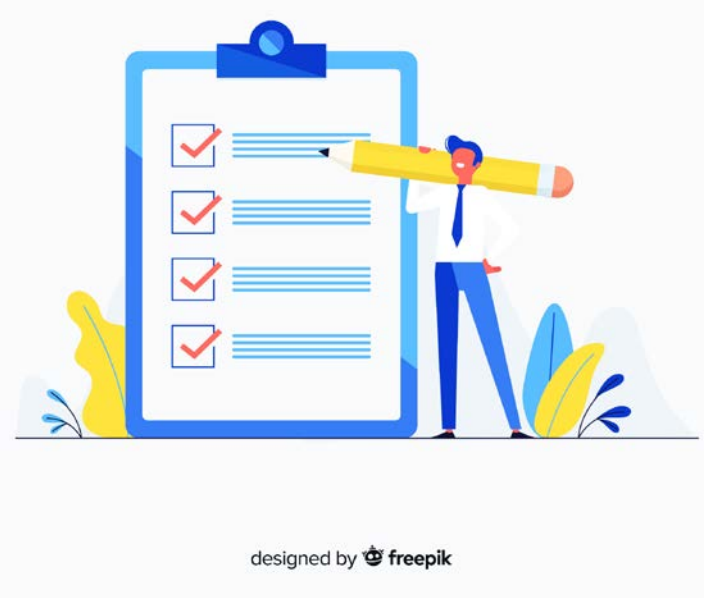
5	Rotavirus vaccine	8.5	0.07	120	☐		☐	☐
						0%		

Ways to set priorities

Third way:

What if we chose the cheapest vaccine(s) we can afford within our budget?



Priority Setting Exercise

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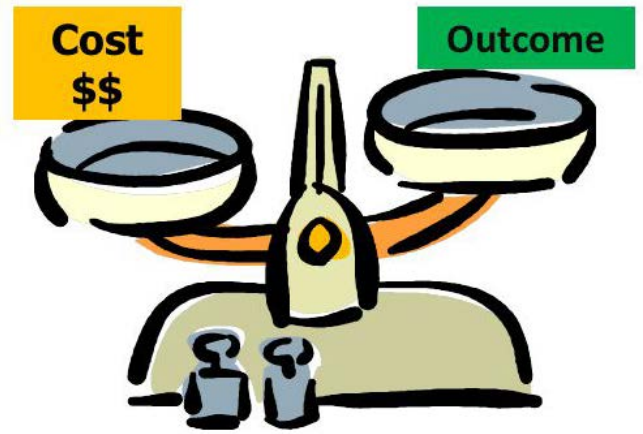
						0%		

Ways to set priorities



Fourth way:

What if we accounted for the vaccine(s) valu for-money?

Priority Setting Exe cise

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4	Pneumococcal	8	0.08	100	☐		☐	☐
5	Rotavirus vaccine	8.5	0.07	120	☐		☐	☐
						0%		

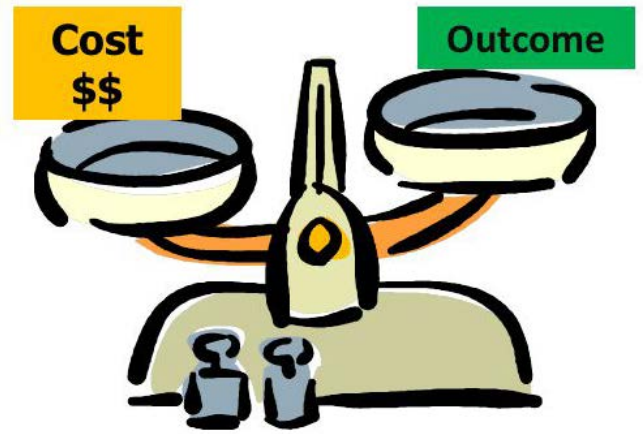
What is value-for-money?

Quality-adjusted life years (QALYs)

- Health gains from an intervention
- Value between 0 and 1, with 0 equating to death and 1 to full health
- A standard measure to compare different types of interventions (so can compare apples and oranges)

image: Freepik.com

Ways to set priorities



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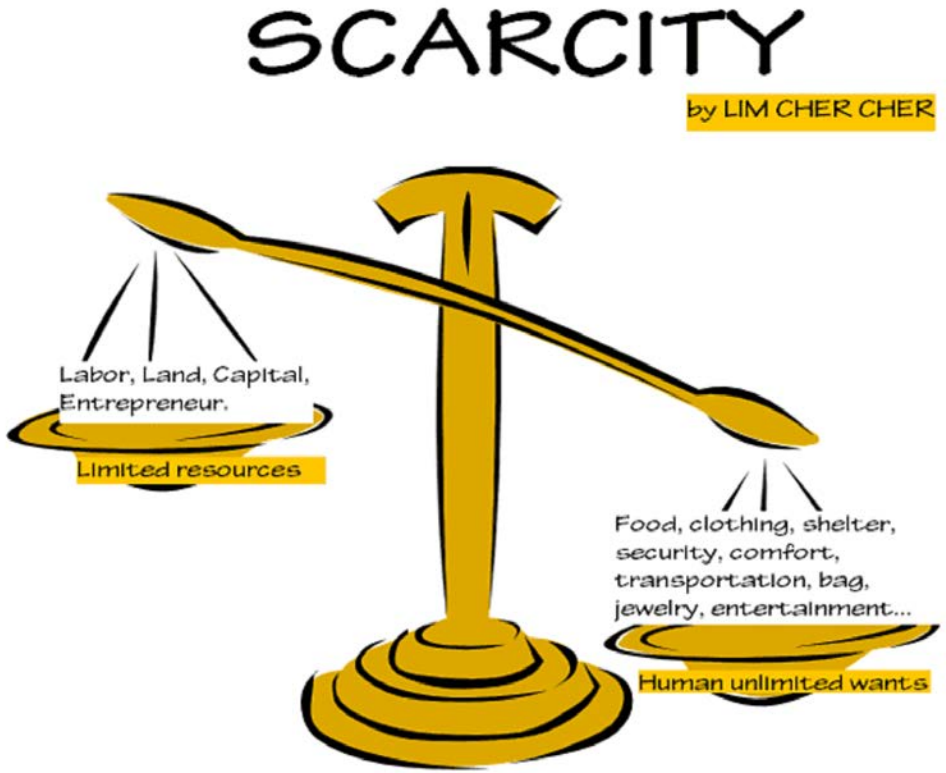
						0%		

What is value-for-money?

Concept of health economics applied in “economic evaluation”



Comparison of the intervention and its alternatives to determine which option has the best outcomes, or is best “value-for-money”

What is value-for-money?

Cost-effectiveness analysis compares the health outcomes of an intervention against the cost

$/QALY gained

- This is the trade-off between the monetary investment and health gains
- Pentavelent example = $10/0.50 = 20

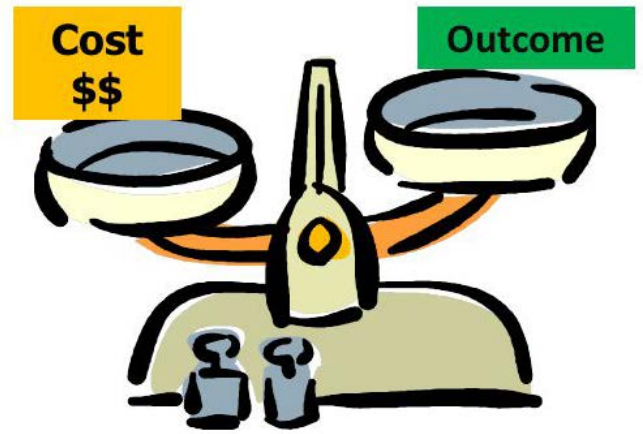
Apple vs Orange

Cost: $1.00
Fullness: 1.5

Cost: $1.00
Fullness: 1

Cost and health gains

Ways to set priorities



Fourth way:

What if we accounted for the vaccine(s) valu for-money?

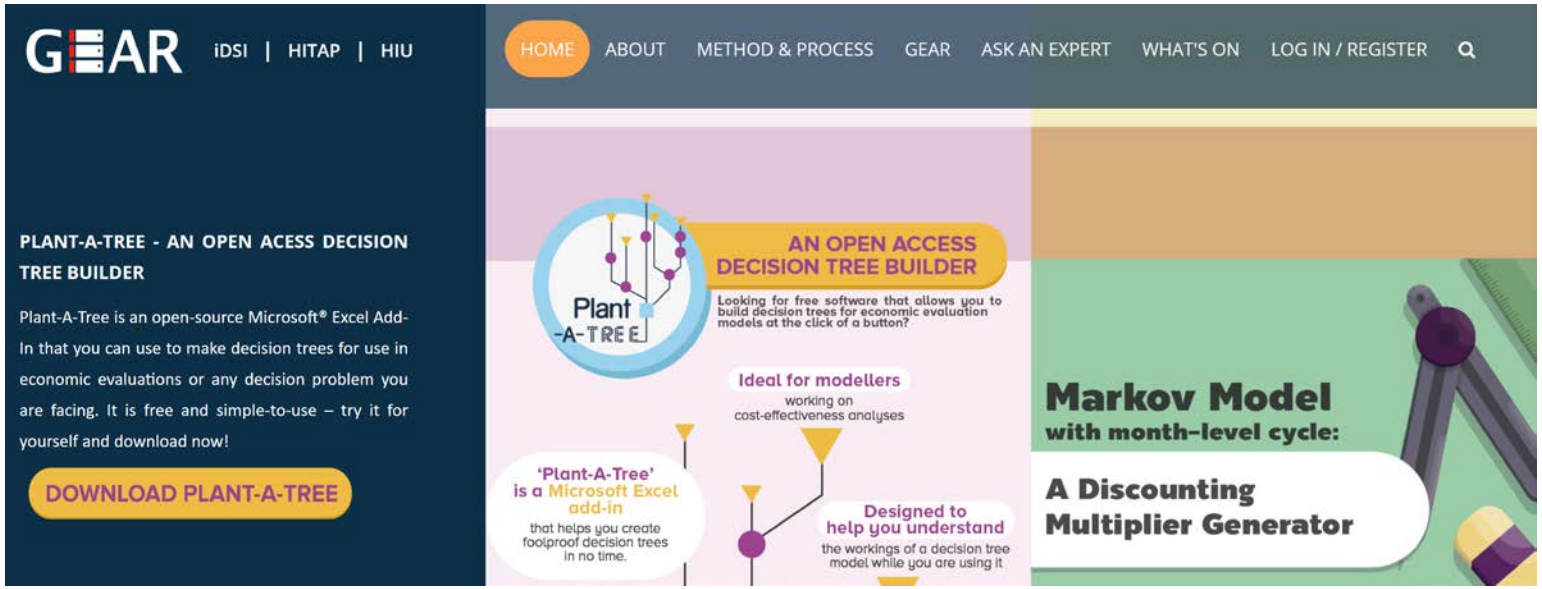
Priority Setting Exe cise

#	Vaccine	$ per immunisation	QALYs gained per immunisation	$/QALY gained	#1: Without budget limitation	#2: Random allocation based on limited budget	#3: Based on vaccine price (cheapest) and limited budget	#4: Based on value for money (CEA) and limited budget
1	Pentavalent	10	0.50	20	☐		☐	☐
2	Measles vaccine	6	0.10	60	☐		☐	☐
3	BCG vaccine	4	0.03	120	☐		☐	☐
4	Pneumococcal	8	0.08	100	☐		☐	☐
5	Rotavirus vaccine	8.5	0.07	120	☐		☐	☐
						0%		

If you want to know more…check out GEAR!

Guide to Economic Analysis and Research (GEAR)

www.gear4health.com



Back to the exercise:

See the QALY (or health) gains and the spending in this section

Priority Setting Exercise

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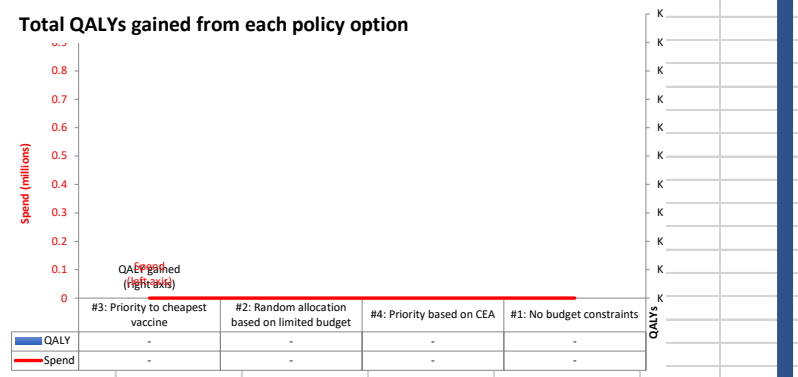
5	**Rotavirus vaccine**	8.5	0.07	120	☐		☐	☐
						0%		

Instruction: Assuming that you are a NITAG member of a country with 200,000 childhood vaccination cohort and limited budget of $4,000,000 per year. There are five vaccines to be considered.

There are four ways to set vaccine priorities. Please follow the vaccine prioritization strategies carefully based on the guidance described at the top of each column in the table above. Next, please examine the bar chart showing total Quality Adjusted Life Years (QALYs) gained and money spent from each resource allocation strategy.

Acknowledgement: this exercise was modified by Yot from the original exercise of the Global Health and Development Group Imperial College London https://www.idsihealth.org/ If you want to use it for other trainings, please kindly contact yot.t@hitap.net



Scenario #1: Full immunisation for all children (without budget constraints)

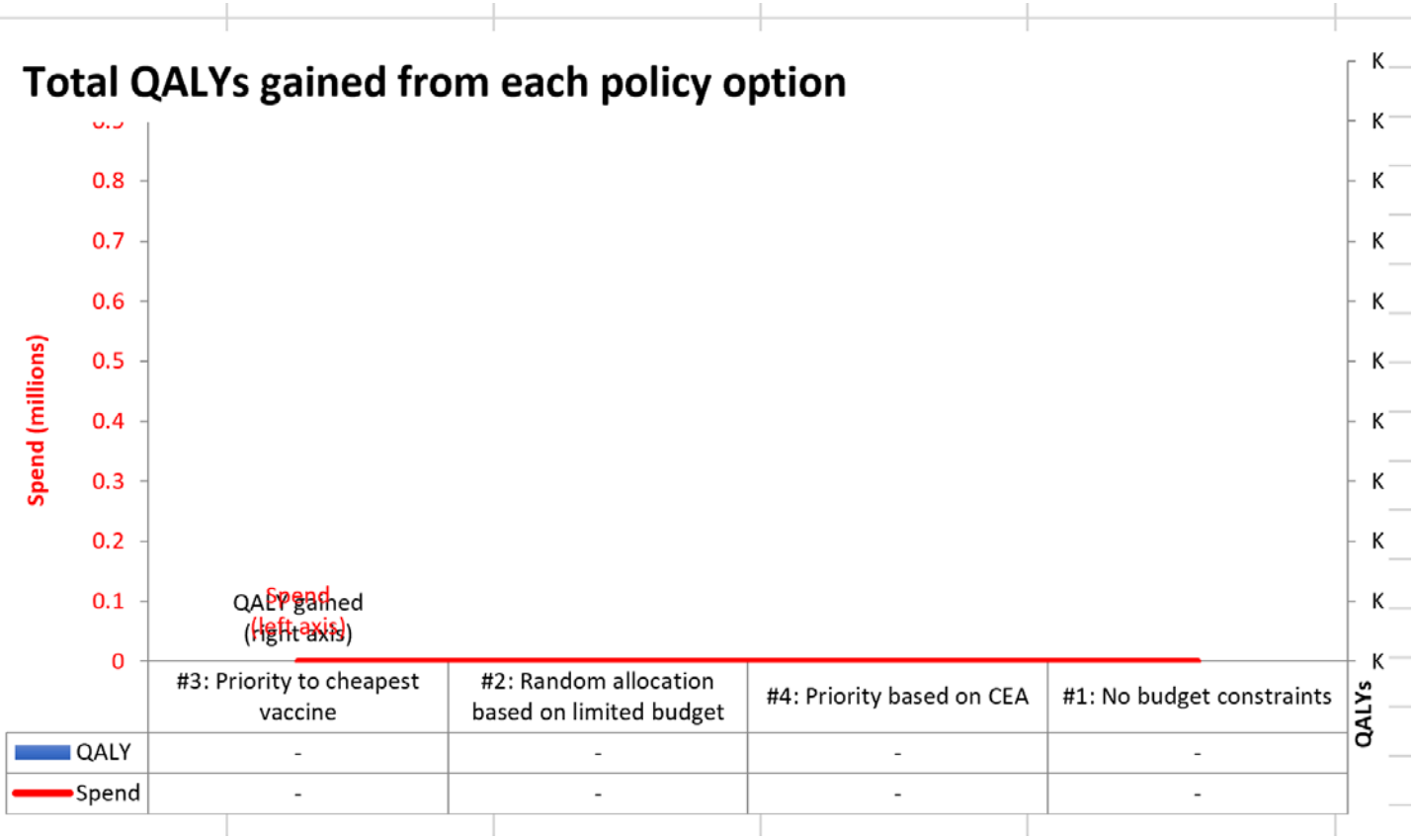
Total cost per immunised child	0
Total QALY gained per immunised child	-
Cost of full immunisation programme	-
Total QALY gained	-

Total budget available this fisical year	4,000,000
Vaccination cohort (childhood population)	200,000

Scenario #2: Random allocation based on limited budget

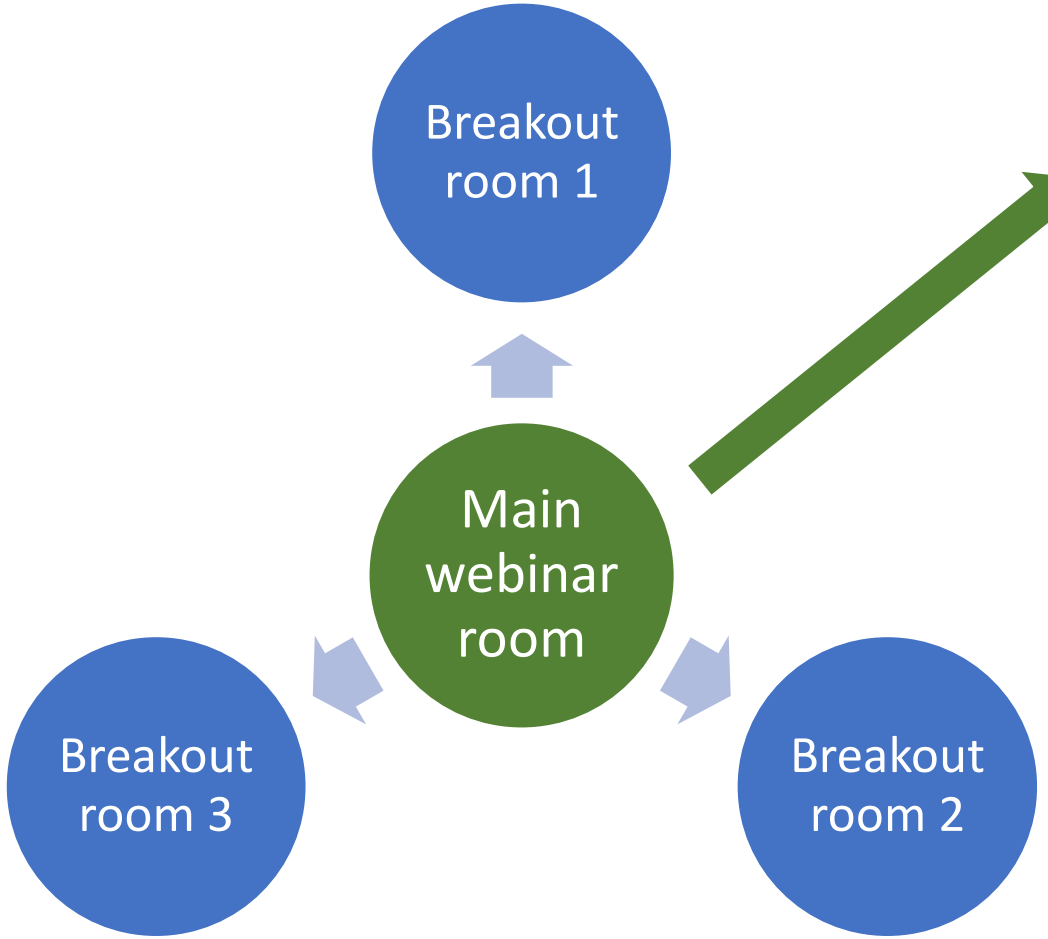
Vaccine	% of Budget	Budget in $	Number of children immunized	QALYs gained
Pentavalent	0%	0	0	0
Measles vaccine	0%	0	0	0
BCG vaccine	0%	0	0	0
Pneumococcal conjugate vaccine	0%	0	0	0
Rotavirus vaccine	0%	0	0	0
Total	0%	0	N/A	0

See the QALY (or health) gains and the spending in this section



On to the exercise!

Let’s go into breakout rooms!



There will be French translation in the main room!

Reactors