Introduction to Economic Evaluations

Technical Workshop
on National Programme for Guideline Development and Adaptation in Egypt

Cairo, 30 January-2 February 2023

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«the only thing that a minister of health is ever destined to discuss with the medical profession in money»

- Ministries often encounter situations where each request for additional funding may be legitimate in that it will improve health
- There never seems to be enough money to do everything worth doing going
- Resources like money, people, time, facilities, equipment are limited in all countries
- Choices must, and will, be made concerning the deployment of resources

«What we did last time», «gut feelings» and «educated guesses »

- Giving support for one or several services/interventions means that something else should be cut back
- Few of us would be prepared to pay for a specific service whose contents were unknown
- Few of us would accept a package even if its content were known and desired until we knew the specific price being asked
- How can a policy maker make an *informed* choice about which of the requests should be supported?

What Economic Evaluation is?

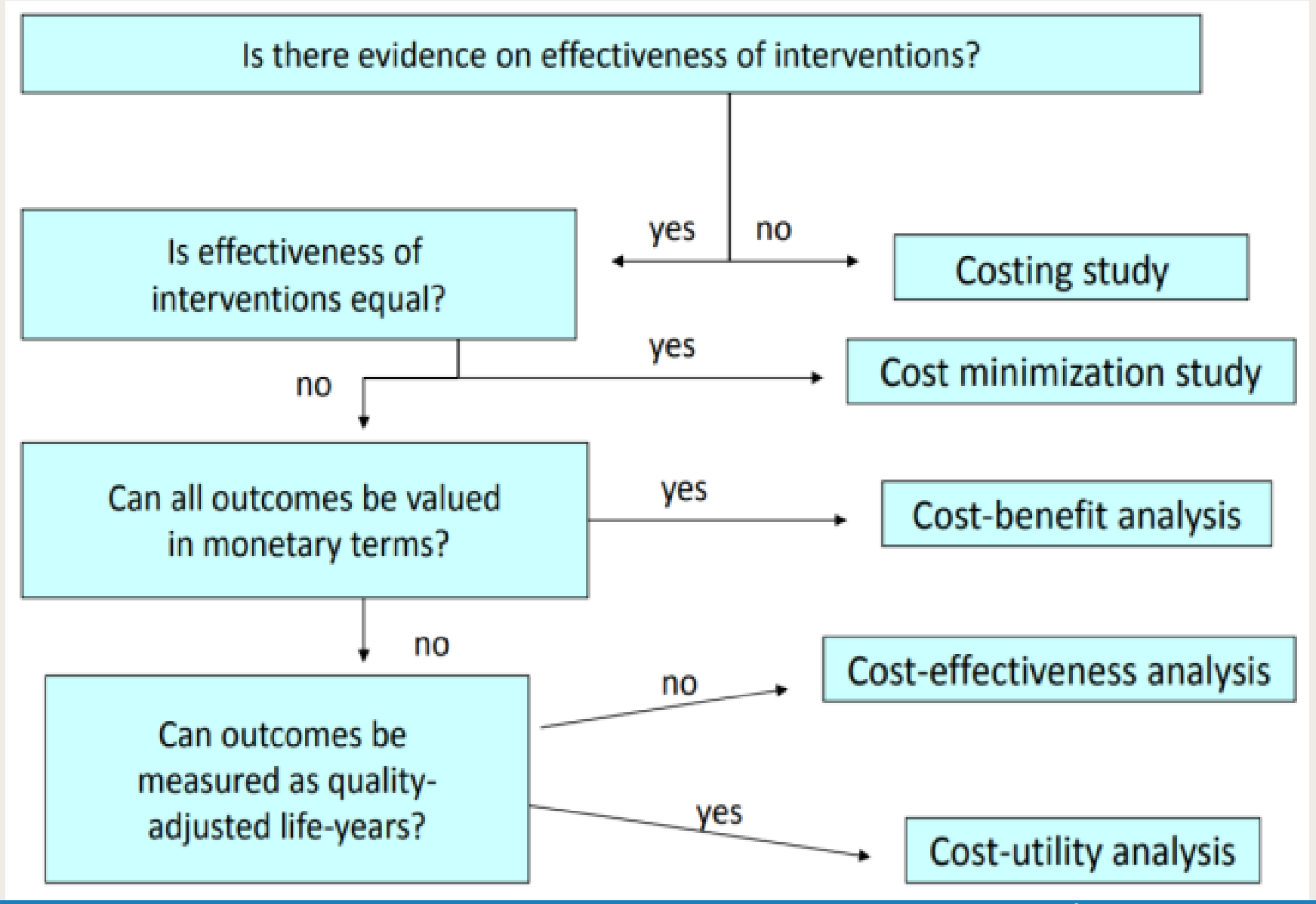
- A structured and systematic framework encompassing a set of tools, methods and techniques for gathering and processing standardized and quantitative data…
- …to provide information on which technologies will maximise value for money in health care – efficiency
- An element of systems thinking, a component of a larger system and output to help policy and decisions makers…
- …with EE results constituting only one of the evidence inputs informing decisions

What are the 4 types of EE?

Different types of EE

Type of analysis	Measurement/ valuation of costs	Identification of consequences	Measurement/valuation of consequences
Cost Minimisation	Monetary units	-	-
Cost Effectiveness	Monetary units	Single effect of interest, common to both alternatives, but achieved to different degrees	Natural units (e.g. life years gained, points of blood pressure reduction)
Cost Utility	Monetary units	Single or multiple effects, not necessarily common to both alternatives	Healthy Years (e.g. quality adjusted life years, disability adjusted life years)
Cost-Benefit	Monetary units	Single or multiple effects, not necessarily common to both alternatives	Monetary units

Choice of study design



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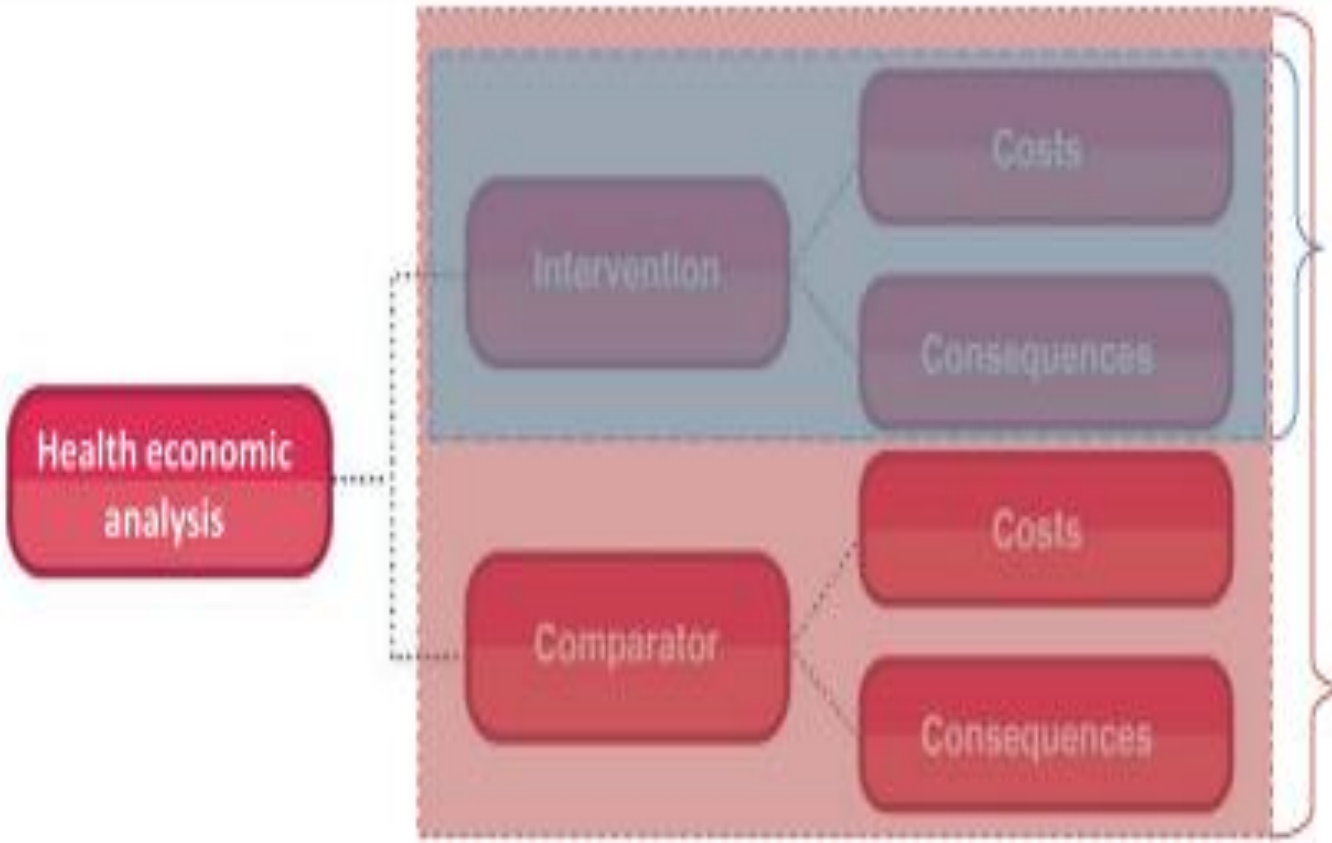
Partial vs Full EE



A cost-outcome study (a type of partial evaluation) would examine both the costs and consequences of an intervention but would only evaluate a single course of action (i.e. it would evaluate a single policy option without a formal reference to a comparator scenario).

Full economic evaluations are a specific type of health economic analysis that explicitly compare the costs and consequences of the intervention(s) in question to an alternative course of action, known as the comparator.

FIGURE 1 | The difference between full economic evaluations and cost-outcome partial evaluations.

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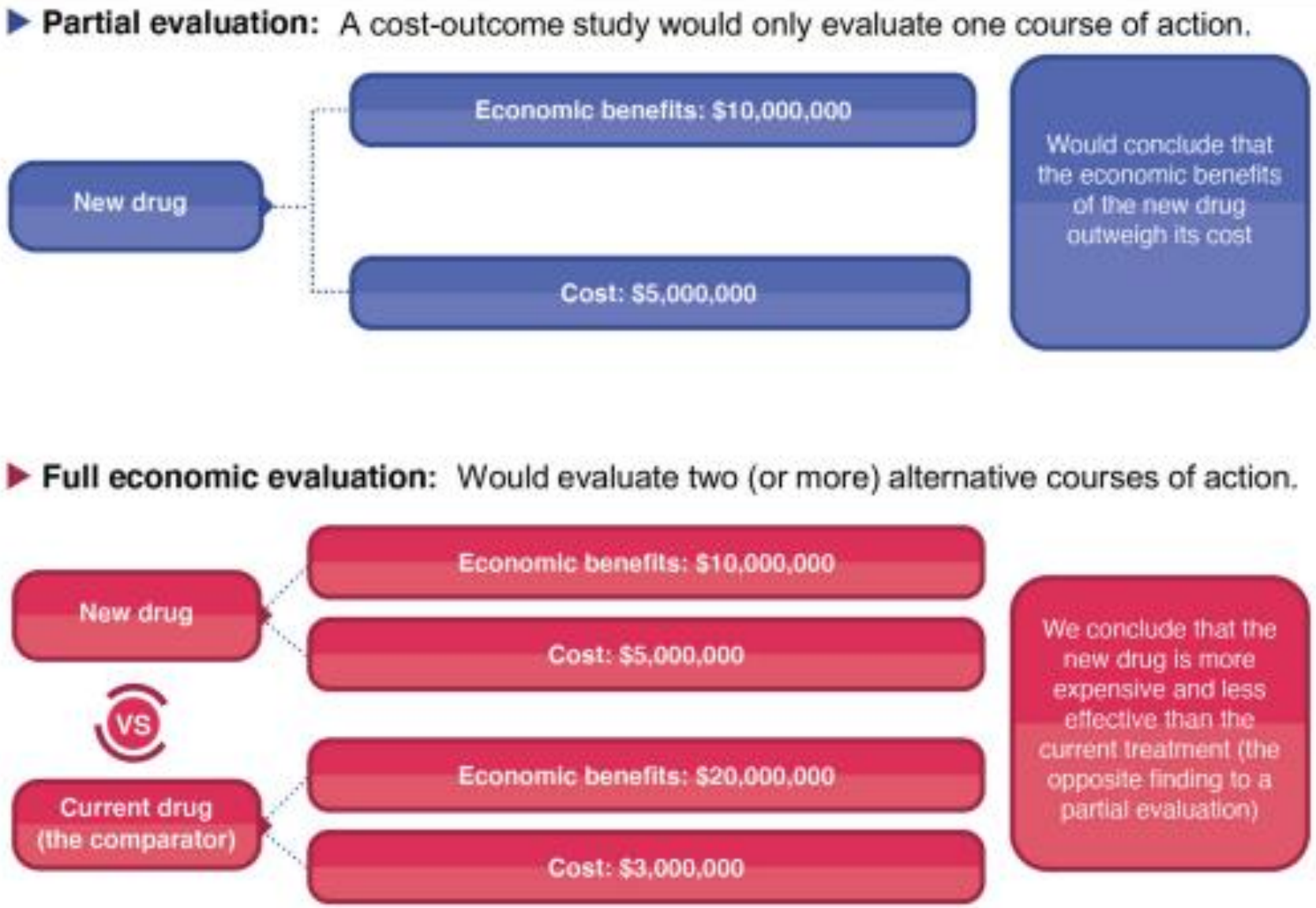


FIGURE 2 | A hypothetical comparison of the difference between a partial evaluation and full economic evaluation.

Cost-effectiveness plane: the 4 quadrants

New intervention costs more

The new intervention costs more and is less effective (existing intervention dominates)

New intervention is more effective and more costly

New intervention less effective

Current practice (comparator)

New intervention more effective

New intervention is less costly but less effective

New intervention costs less and is more effective (New intervention dominates)

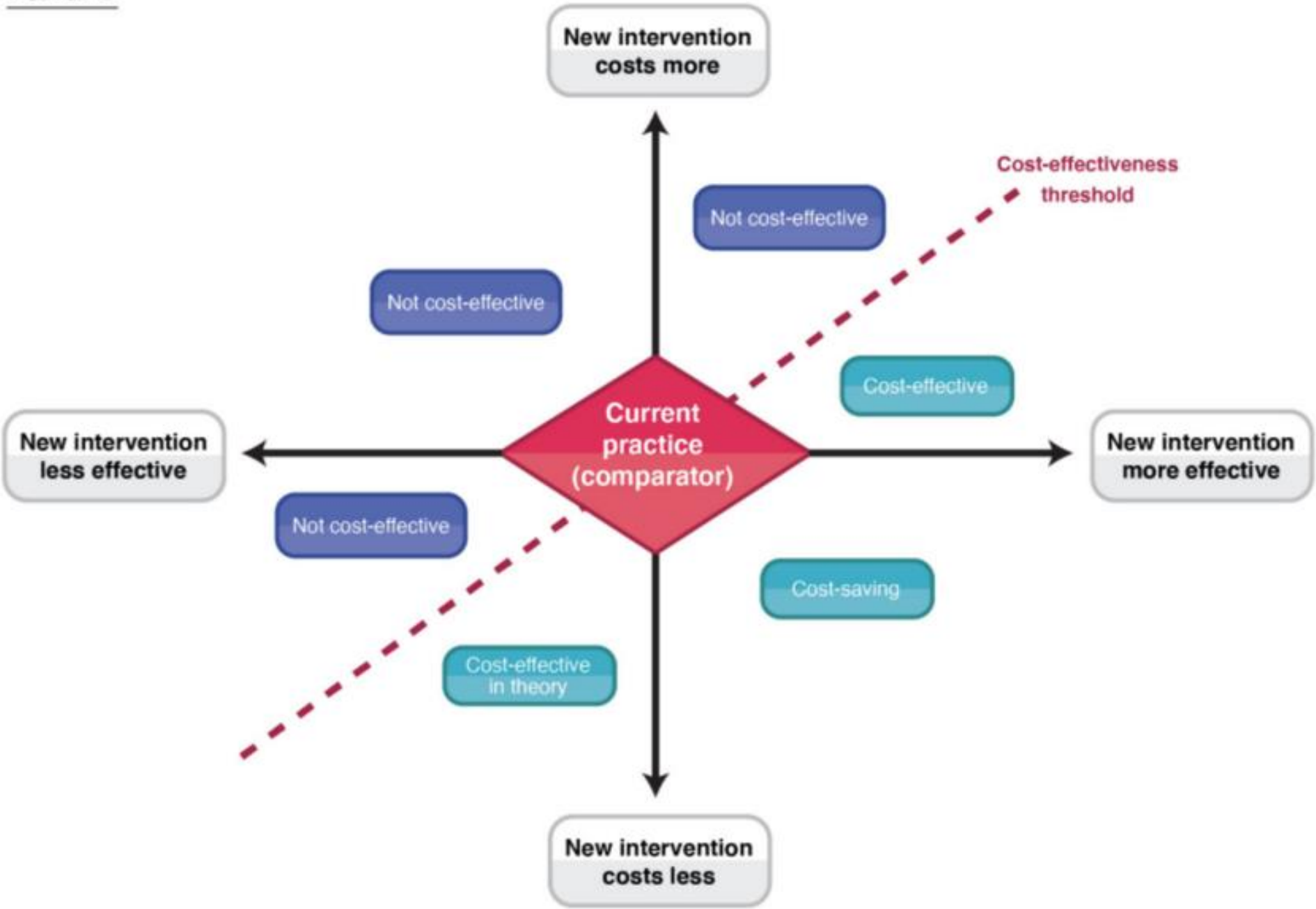
New intervention costs less

Cost–effectiveness thresholds: pros and cons

Melanie Y Bertram,[a] Jeremy A Lauer,[a] Kees De Joncheere,[a] Tessa Edejer,[a] Raymond Hutubessy,[a] Marie-Paule Kieny[a] & Suzanne R Hill[a]

- When the benefits of an intervention are > than its opportunity cost (the benefits forgone from other interventions), an intervention is deemed 'cost-effective'
- Opportunity costs are reflected by a threshold (CET) - ‘the cost per unit of health benefit forgone’
- CET depends on the funding arrangements in the system, the health benefits of other interventions, the budget constraints - beware of generic thresholds !
- Need for context-specific process for decision-making, supported by legislation, has stakeholder buy-in and is consistent, fair and transparent

Panel B



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Using Economic Evaluations in Guideline Development and Adaptation

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Which resource use considerations are of interest?

How resource intense is the intervention?

- Financial impact of the adoption and diffusion of an intervention within a particular setting
  - Budget Impact Analysis: who pays or saves money? When do cost occur?

  "aim is that a guideline does not introduce a cost pressure into the health and social care system [...] in terms of additional cost or saving above that of current practice for each of the first 5 years of implementing the guideline" UK NICE

- Range and quantity of resources needed, in natural units
  - Number and time of nurses e.g.
  - Linked to feasibility: How much of the required resources are available?

Is it value for money?

- EE compared to standard of care (can be a do-nothing situation)
- What is the opportunity cost of investing in the intervention or service? Are the net benefits worth the costs?

How budget impact and value for money can influence a recommendation?

GRADE context

- Resource use considerations should be made at the stage of formulating a recommendation
- The more advantageous the resource implications, the greater the likelihood of a strong recommendation for the intervention
- The clearly disadvantageous the resource implications are, the greater the likelihood of a strong recommendation against the intervention.
- A conditional recommendation is more likely to be issued if the resource implications are uncertain or likely to vary significantly across settings

Where can you find information on the value for money of an intervention?

How to collect economic evidence ?

- **Conduct *de novo* EE**
  - e.g. for a new technology in a given context
  - can be resource intensive: time, staff, money
- **Use an existing EE**
  - rarely adopted; more often EE need updated and revised
  - most variables that define CE ratios change over time (new treatments/technologies appear, input prices vary, etc)
- **Systematic review of EEs**
  - In some countries, reviews are recommended along EE
  - EE quality should be appraised for quality, and potentially adapted

Involve an economist early on

- Advice on affordability concerns, through BIA
- Advice on efficiency matters, though EE
- Advice on searching, appraising and adapting economic literature

Transferability

- Often economic information may be too indirect for decision making
- Transferability is the degree to which a study holds true in a different setting
- Quantities of resource and their monetary values vary across countries probably as much or even more than the health outcomes of treatment
- Can expose local decisions to important biases
- Economic information shall be contextualised and if needed adjusted, accounting for local factors in which the technology is to be applied

Lack of tools and approaches

- No global, explicit gold standard process for evaluating transferability
- Possible to list the factors to consider for local relevance
- Need a transparent and objective process

ELSEVIER

Journal of Clinical Epidemiology
Volume 148, August 2022, Pages 81-92

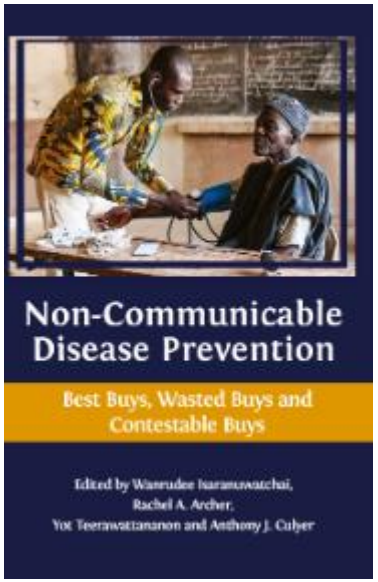
Other GRADE Papers

Indirectness (transferability) is critical when considering existing economic evaluations for GRADE clinical practice guidelines: a systematic review

4 options

- Apply the external evidence without further adjustment
- Modify the analysis based on local data
- Use the evidence with caution when the economic evidence is not necessrely highly transferable but still deemed informative to the decision probelem
- Reject the evidence

Step 1: Initial assessment of study design



Step 1: Initial assessment of study design			
Criteria	**Evaluation questions for each criterion**		**Decision Question:** Considering your evaluation for each criterion, is the original study warranted for the further assessment?
	Q1: Is the listed study characteristic aligned with local decision-making context? (If No, go to Q2)	Q2: Is the original study still informative to the decision problem?	
Study perspective			A. No, reject the external evidence B. No, but the external evidence can be used with caution C. Yes, proceed to data transferability assessment (Step 2)
Intervention and its comparator(s)			
Time horizon			
Discounting			
Study quality			

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Step 1

- Perspective; Intervention and its comparator(s); Time horizon; Discounting; and Study quality.
- If any of these components do not meet the minimum criteria — which are subject to the evaluator's judgment — the study conclusion cannot be applied to local settings.
- When the original study results are judged as potentially useful (e.g., through sensitivity analyses reporting how Incremental Cost-Effectiveness Ratios [ICERs] vary by different perspectives), the evaluator may either apply the original findings with caution or proceed further to the data transferability assessment

Study quality

- When considering transferability, evaluators may understandably wish to exclude EE of low quality: how to determine quality?
- Various guidelines and checklists on conducting and reporting CEAs
- High quality does not mean high transferability or relevance to local settings
- CoI considerations

Husereau *et al. BMC Medicine* (2022) 20:23
https://doi.org/10.1186/s12916-021-02204-0

BMC Medicine

GUIDELINE Open Access

Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) statement: updated reporting guidance for health economic evaluations

Perspective

- Is the perspective aligned with your own decision-making preferences?
- It determines which costs and benefits to include in the analysis.
- Depending on the choice of perspective, an intervention may be more cost-effective (i.e., have a lower ICER) or less cost-effective

medication for patients with alcohol use disorder may be more cost-effective from a societal perspective than a healthcare sector perspective because of improved outcomes that go beyond the healthcare sector, such as improved productivity or reduced alcohol-related motor-vehicle accidents.

Huge shake-up of NHS drug guidelines could see doctors give millions more Brits the cheap cholesterol-busting pills

- Drugs watchdog has widened the eligibility criteria for cholesterol-busting pills
- GPs will be able to prescribe the 2p-a-day tablets to anyone who asks for them
- READ MORE: Statins' success may be fuelling obesity crisis, experts say

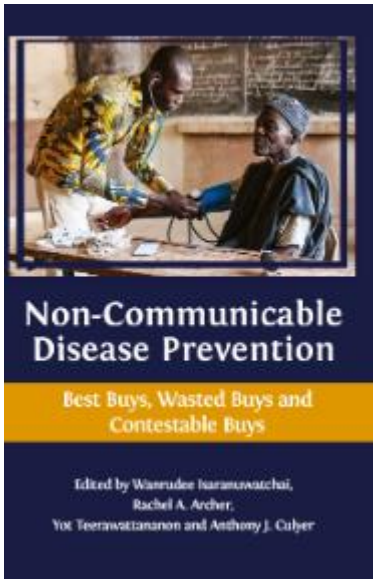
Intervention and Comparator

- EE should reflect the specific decision problem
  - e.g., interventions in routine use in the local setting
- the comparator in the original study should be relevant to the local settings
- Inadequate description of the intervention and comparator(s) in the original study may also limit transferability.

Discounting

- A discount rate reflects society's (or a specific decision-maker's) time preference (i.e., how much they are willing to trade off consumption today vs. tomorrow).
- Future costs and health outcomes are generally discounted in EEs
- Discounting makes near-term consequences (e.g., immediate costs and health benefits) more valuable than long-term consequences (e.g., costs and health benefits occurring in distant future).
- The use of higher discounting rates (i.e., strongly devaluing distant costs and benefits) tends to underestimate the value of preventive interventions.
- Local evaluators may wish to select a time preference suitable for their country or context, or there may be standard rules set for all public-sector investment decisions.

Step 2: Data transferability assessment



Step 2: Data transferability assessment					
Major considerations	**Evaluation questions for each data input**				**Decision Question:** Considering your evaluation for each criterion, is the original evidence transferable to your local setting?
	Q1: Are the original input data applied to the local setting? (If No, go to Q2)	Q2: Is local data on the specific input available? (If Yes, go to Q3 If No, go to Q4)	Q3: Is appropriate adjustment for local data input possible? (If No, go to Q4)	Q4: Is the data input used in the original study still informative to the local context?	
Baseline risk					A. No, reject the external evidence B. No, but the external evidence can be used with caution C. Yes, but only after appropriate adjustments for local data input D. Yes, apply the external evidence as it is
Treatment effects					
Unit costs/prices					
Resource utilization					
Health-state preference weight					

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Baseline Risk (disease Profile)

- Variation in underlying population risk factors across countries
  - different inherent baseline risk characteristics, such as differences in disease incidence, prevalence and background mortality.

- May influence both an intervention's effects and its costs
  - e.g. implementing a nation-wide screening program for type 2 diabetes may generate more favorable ICERs for countries with a higher prevalence of undiagnosed type 2 diabetes.
  - the evaluator must determine whether the baseline risk in the original study is relevant to the local context.
  - E.g. zinc suppl in Ghana

Unit costs/Prices

- Adjusting for unit costs or prices relevant to the local context will typically be required for data transferability.
- EE often conduct sensitivity analyses on the prices of the intervention/comparator(s) as well as the prices for other services.
- Assuming that all other data inputs are relevant to the local setting, if the original study provides results from sensitivity analyses for a range of intervention prices, evaluators could extract the ICERs relevant to their local settings without re-analyzing the data.

Resource utilisation

- Similar to the case for unit costs, the application of locally-relevant resource use data (e.g., on hospital days, physician office visits, or medications) may be required for the estimation of overall costs associated with the intervention and comparator(s).

- strongly encourage the use of locally-relevant resource data.

Health state preference weight

- Health-state preference weights, used as inputs into calculations of QALYs, represent the relative desirability for being in different health states.

- Because of social and cultural factors, individuals in different countries may assign different values to similar health states.
  - Previous studies have demonstrated that the valuations of health states can be different for US and UK residents and, as a result, cost-effectiveness ratios were doubled when adjusted to US-specific weights.

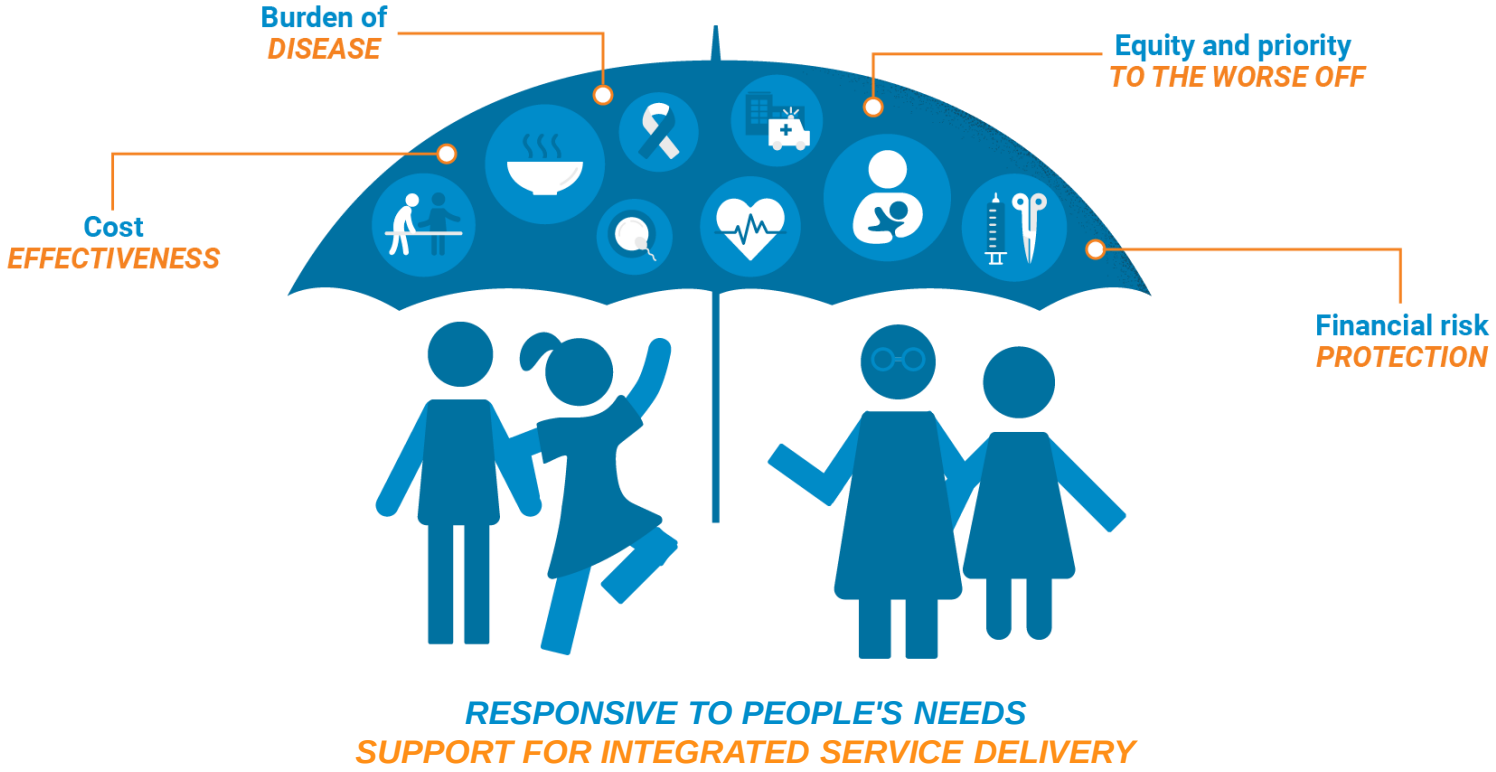
Key messages

«the process for assessment of transferability remains complicated and similarly act as basis for improved discourse between clinician panels making practice recommendations and economists traditionally making coverage decisions» (Rivers et al. BMJ 2022)

- Add a competency in economics to a guideline development team

WHO UHC Compendium

- Promotes the use of explicit criteria, data and dialogue during priorty setting and benefit package design
- Based on WHO guidelines, costing and EE tools to support country level resource use considerations during priority setting



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WHO UHC Compendium

Guidance across all major health areas/diseases

Link to Service Package Delivery and Implementation tool to facilitate explicit choices for investment & implementation

Allows countries to incorporate context relevant information

Links to cost-effectiveness data and country costing tools

Foundational services drive an integrated people-centred approach

Standardized architecture of interventions & associated resources

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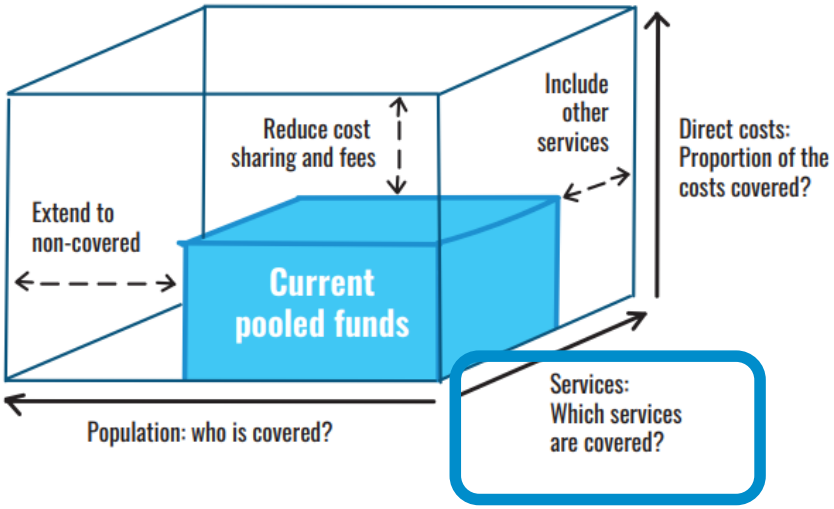
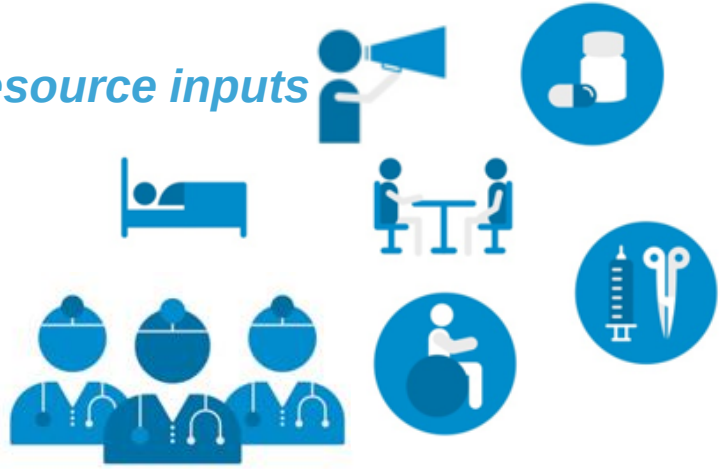


Clinical guidelines and programmatic guidance

Resource inputs



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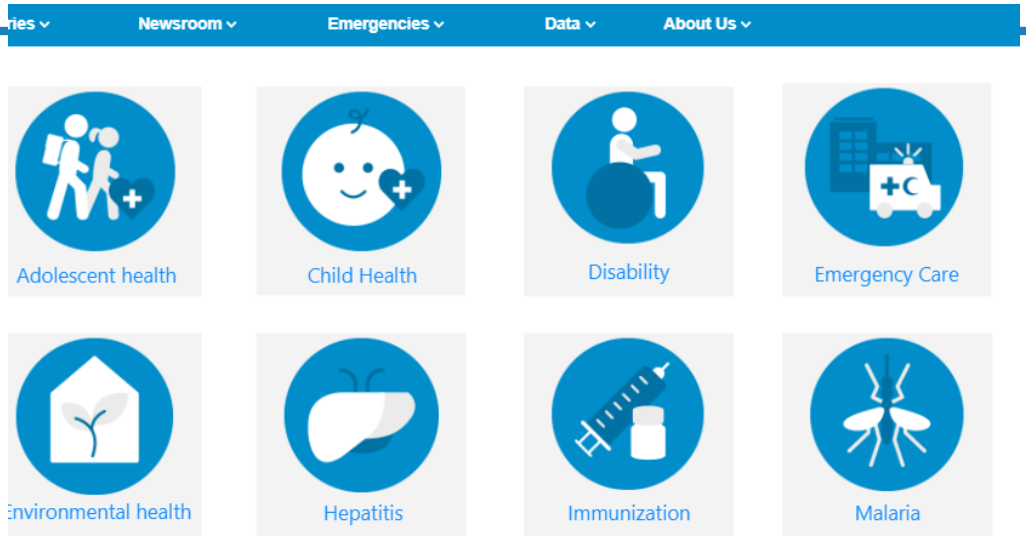
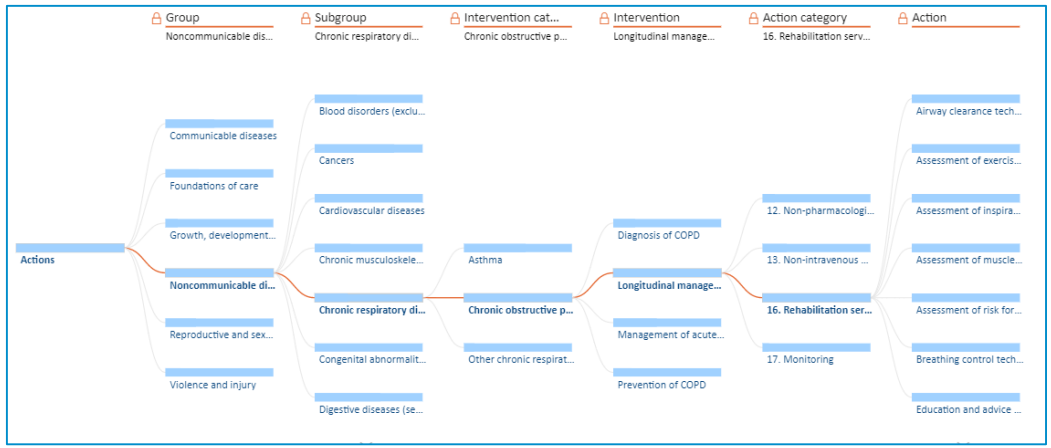
Includes the services that represent the core CONTINUITY AND COORDINATION functions of primary care.

Approaches to common problems

and full range of health areas



In a structured architecture



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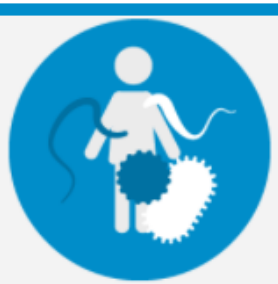

Neglected Tropical Diseases

Surgery and anesthetic

Non-Communicable Diseases (NCDs)

Mental Health and Substance use

Occupational health

Rehabilitati

Click on a program icon below ess interventions and actions linked to health programmes.

This report has been filte /Value Non-Communicable Disease

The full report you can find here

Group	Subgroup	Intervention category	Intervention	Action category	Action	ife course
Noncommunicable diseases and mental health	Neurologic disorders	Acute convulsive seizures and epilepsy	Diagnosis of epilepsy	04. Screening	Screening for substance use or withdrawal	ll ages
Noncommunicable diseases and mental health	Neurologic disorders	Acute convulsive seizures and epilepsy	Diagnosis of epilepsy	08. Laboratory	Laboratory tests	ll ages
Noncommunicable diseases and mental health	Neurologic disorders	Acute convulsive seizures and epilepsy	Diagnosis of epilepsy	09. Imaging studie	Electrocardiogram (ECG)	ll ages
Noncommunicable diseases and mental health	Neurologic disorders	Acute convulsive seizures and epilepsy	Diagnosis of epilepsy	09. Imaging studie	Magnetic resonance imaging (MRI)	ll ages
Noncommunicable diseases	Neurologic disorders	Acute convulsive seizures and epilepsy	Diagnosis of epilepsy	10. Diagnostic procedures	Lumbar puncture	ll ages

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Information provided on resource inputs, delivery platforms, relevant packages, programmes and targets

Hearing aid trial and fitting

NONCOMMUNICABLE DISEASES AND MENTAL HEALTH

- ▼ Diseases of the sense organs
  - ▼ Ear diseases and hearing impairment
    - ▼ Management of hearing impairment
      - Induction loops
      - Topical antimcrobial ear drops for ear diseases
      - Oral antimicrobials for ear diseases
      - Adjustment and maintenance
      - Cerumen disimpaction
      - Cochlear implant adjustment and maintenance
      - Cochlear implantation
      - Computed tomography (CT) scan
      - Grommet insertion
      - **Hearing aid trial and fitting**

Short text description

Fitting a hearing aid requires that a facility be available for hearing testing prior to recommending a hearing aid. This is essential to ensure that a suitable hearing aid is provided and gives the required benefit to the person with hearing impairment. The tester should also be able to recognize common red flags that require specialist referral. In case of children, it is important to have expert evaluation prior to hearing aid provision. Rehabilitation services should be available for those who need them.

Health programme

Noncommunicable diseases, Child health, Disability, Rehabilitation, Adolescent health, Healthy ageing

Resources required

Health workers: 2

Medical devices: 1

Assistive products: 1

Delivery platform

Specialized outpatient services

Target population

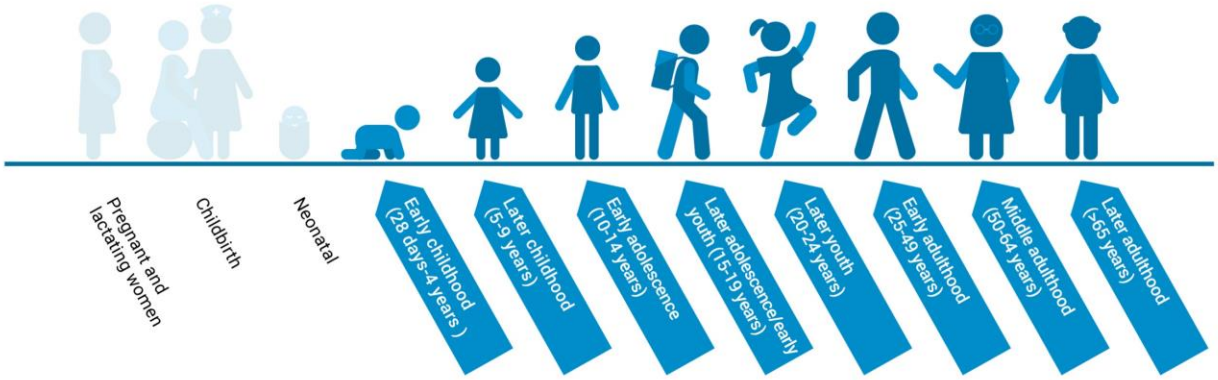
Persons with mild to severe hearing loss

SDG context

3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

Age/Life course stage

Relevant stages are marked in blue



Disclaimer: This page provides an illustration of the resource requirements for the selected clinical action.
Resource requirements vary in different contexts, and this illustration should be used only as a reference point for contextualization..

(1/2)

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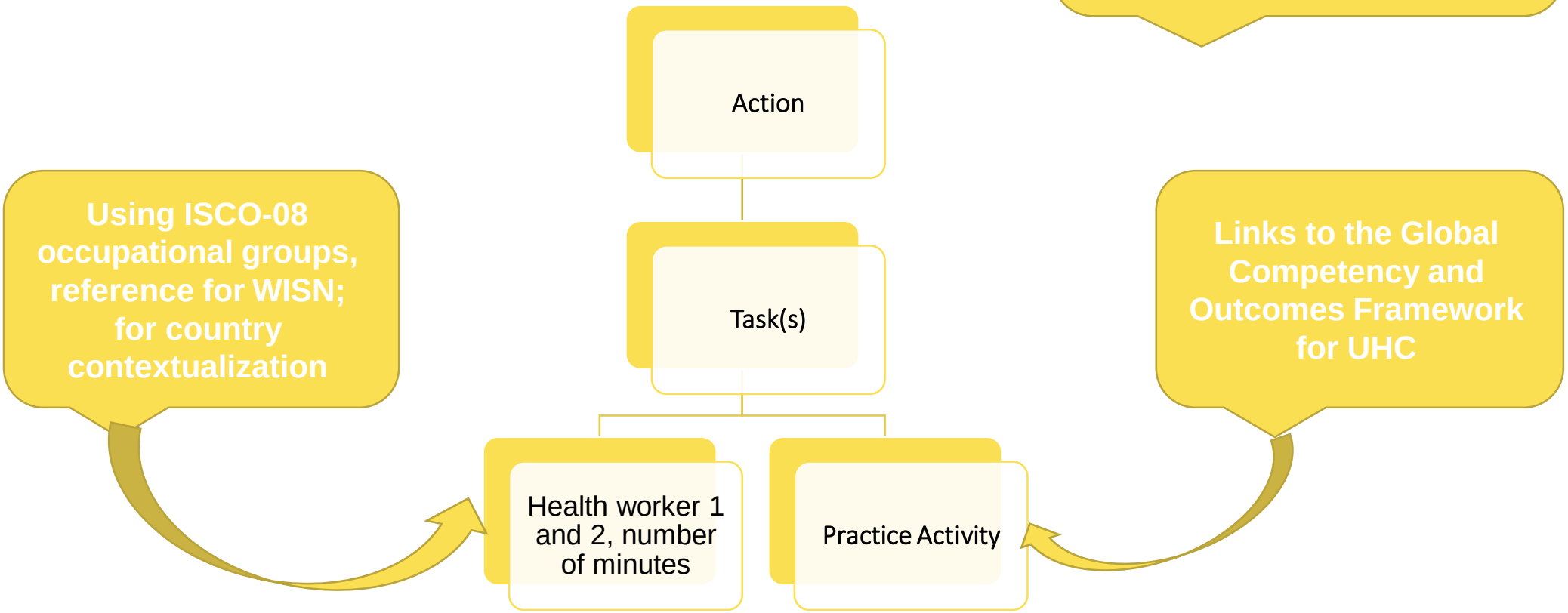
UHCC links to health workforce

Standardized approach to estimating HWF resources: rooted in guidelines/guidance or expert judgement using standardized assumptions



Using ISCO-08 occupational groups, reference for WISN; for country contextualization

Links to the Global Competency and Outcomes Framework for UHC

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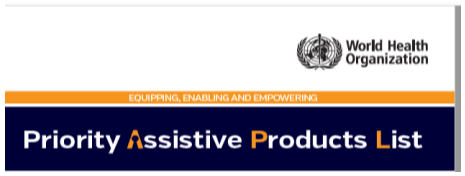
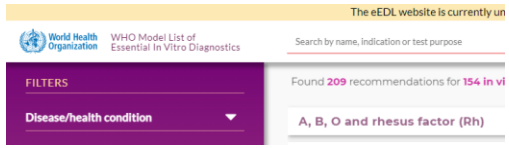
UHCC Links to WHO lists of Health products



Priority Assistive Technologies List (APL)



Essential in vitro diagnostics List eEDL (IVD)

Priority medical devices List (PMD)

Essential Medicines List (EML)

Integrate information from WHO electronic platforms to UHC Compendium

UHC Compendium

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UHC Compendium data will be made available in country support tools

- **UHC Service Package Delivery and Implementation (UHC SPDI) Tool,** allowing users to view the entire Compendium health service list and create service packages and allocate services to platforms. Cost-effectiveness data indicated to guide selections.
- **OneHealth Tool/IHT**, allowing users to estimate costs for delivering a strategic plan / package of services.
- **WHO cost-effectiveness tools**, allowing users to generate context-specific cost-effectiveness estimates which can inform the decision on what to include in the package of services.

IHS department - UHC day event

Ongoing work to incorporate data into tool set

Thank you!

Country example: NICE

Illustration: NICE

- Aim is that a guideline does not introduce a cost pressure into the health and social care system unless the committee is convinced of the benefits and CE of the recommendation
- Resource impact can be considered in terms of additional cost or saving above that of current practice for each of the first 5 years of implementing the guideline
- In the UK «implementing a single guideline recommendation in England costs more than £1 million per year or implementing the whole guideline in England costs more than £5 million per year»

Illustration: NICE

- Priorities for EE should be defined during the scoping of the guideline and should be reviewed when the review question are being developed
- Questions on economic issues mirror the review questions on effectiveness, but with a focus on cost-effectiveness
- Start with a review of the literature of published economic evidence to determine whether the review questions set out in the scope have already been assessed by economic evaluations.

Illustration: NICE

- Comparator: interventions routinely used and current best practice
- Perspective on costs: the provider payer
- Perspectives on outcomes: all direct health effects whether for people using services or when relevant other people such as informal care givers, family members (non-health effects if payer is not NHS)
- Time horizon: long enough to reflect all important differences in costs or outcomes between interventions compared

Illustration: NICE

- Source of data for measurement of quality of life: reported directly by people using service and/or carers
- Source of preference data for valuation of changes in health-related quality of life: representtaive sample of the UK population
- Discounting: same rate for costs and health effects (UK 3.5% currently), with sensitivity analysis using rates of 1.5%

Illustration: NICE

- Evidence on resource use and costs: costs relate to the perspective used and should be valued using the prices relevant to that perspective
- Costs borne by people using services and the value of unpaid care may also be included if they contribute to outcomes

Illustration: NICE

- The committee should discuss CE in parallel with general effectiveness when formulating recommendations

- Increase effectiveness at an acceptable level of increased cost,

or

- Are less effective than current practice but free up sufficient resources that can be reinvested in public sector care to services to increase the welfare of the population receiving care

Illustration: NICE

- If there is strong evidence that an intervention dominates the alternatives (that is, it is both more effective and less costly), it should normally be recommended.
- But, if one intervention is more effective but also more costly than another, then the ICER should be considered.
- the committee has to decide whether it represents reasonable 'value for money' as indicated by the relevant ICER.

Illustration: NICE

- ICER above which an intervention should not be recommended and below which they should is difficult to identify, even for NICE
- In general ICER of less than £20,000 per QALY gained are considered cost-effective in the UK context
- It may be that committee recommend not to provide an intervention with an ICER below £20,000. if so they should provide explicit reasons
  - E.g. if they are significant limitation to the generalisability of the evidence for effectiveness

Recommendations when there is no economic evidence

- When no relevant published studies are found, and a new economic analysis is not prioritized, the committee should make a qualitative judgement about CE by considering potential differences in resource use and cost between the options alongside the results of the review of evidence of effectiveness.
- This may include considering information about unit costs, which should be presented in the guideline.
- The committee's considerations when assessing CE in the absence of evidence should be explained in the guideline.

Further considerations
NICE

- Decisions about whether to recommend interventions should not be based on cost-effectiveness alone.
- The guideline committee should also take into account other factors, such as the need to prevent discrimination and to promote equity.
- The committee should consider trade-offs between efficient and equitable allocations of resources.
- These factors should be explained in the guideline.

Local considerations

- For service delivery questions, cost-effectiveness analyses may need to account for local factors, such as the expected number of procedures and the availability of staff and equipment at different times of the day, week and year.

Service failures

- Service designs under consideration might result in occasional service failure – that is, where the service does not operate as planned.

- For example, a service for treating myocardial infarction may have fewer places where people can be treated at weekends compared with weekdays as a result of reduced staffing. Therefore more people will need to travel by ambulance and the journey time will also be longer. Given the limited number of ambulances, a small proportion may be delayed, resulting in consequences in terms of costs and QALYs. Such possible service failures should be taken into account in effectiveness and economic modelling. This effectively means that analyses should incorporate the

Service demand

- Introducing a new service or increasing capacity will often result in an increase in demand. This could mean that a service does not achieve the predicted effectiveness because there is more demand than was planned for. This should be addressed either in the analysis or in considerations.

PICO activity

Activity PICO

- Examples of well formulated PICO question:

Is breast cancer screening (I) in women 70 years of age or older with an average risk of breast cancer (P) as cost–effective as no screening (C) in preventing death from breast cancer (O)?

In a national population (P), how does one intervention (I) perform, compared with another (C), in terms of cost per quality-adjusted life years gained over a 5-year period (O)?

Activity PICO

Over to you!

“Is screening of adults for diabetes cost–effective?”

Q: Is it a well formulated question?

A: No, it is poorly formulated

Why?

Activity PICO

- What is the specific population?
  - Although this may not be specified in the key question per se, “adults” should be further defined in terms of age, sex, risk factors for cardiovascular disease, for example.
- What is the specific intervention?
  - What type of diabetes is being considered here? Diabetes mellitus? Type 1 and 2, or just type 2?
  - What are the operating characteristics of the screening test?
- What is the comparator? No screening?
  - What is the Outcome?
    - Cost–effectiveness is based on a specific outcome, such as quality adjusted life years gained: for what outcome is cost–effectiveness being examined in this question?
    - Cost–effectiveness is a relative concept: what is the threshold used to assess whether screening is considered cost–effective?
    - For what time frame is cost–effectiveness being considered?

Additional slides

Dimensions reviewed for transferability by economists for grade, rivers 2022 BMJ

Population characteristics

- Population may differ from those of interest
- Substantial differing cost implications
  - Population-based screening with high false positives, such as in breast cancer screening
  - In highly infectious disease like COVID-19, spread may vary from country to country thereby affecting economic outcome estimate
  - Population disease severity may have cost consequences for questions based on frail older adults or for questions in HIV patient with co morbidities

Intervention and comparator characterictics

- They may weigh substantially by differing long term costs
  - Cost of medications like warfarin versus direct oral anticoagulants, in the prevention of venous thromboembolism
- Unrealistic protocol driven resource use estimates compared to use of a more pragmatic intervention
- Extent that clinical practice varies between countries can affect the relative CE of therapies
- Is the comparator the standard of care in the context?
  - Is it an inexpensive medication formulation or an expensive non pharmacological programme alternative for chronic pain mangement ?

Resource use methodology

- Various instruments have been developed to assess the quality of an EE - checklists
- Note that a poorly conducted EE can score high on checklist because it is well reported
- Reporting is the first step in a more explicit evaluation process

Research Methods & Reporting

Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) statement: updated reporting guidance for health economic evaluations

BMJ 2022 ; 376 doi: https://doi.org/10.1136/bmj-2021-067975 (Published 11 January 2022)
Cite this as: *BMJ* 2022;376:e067975

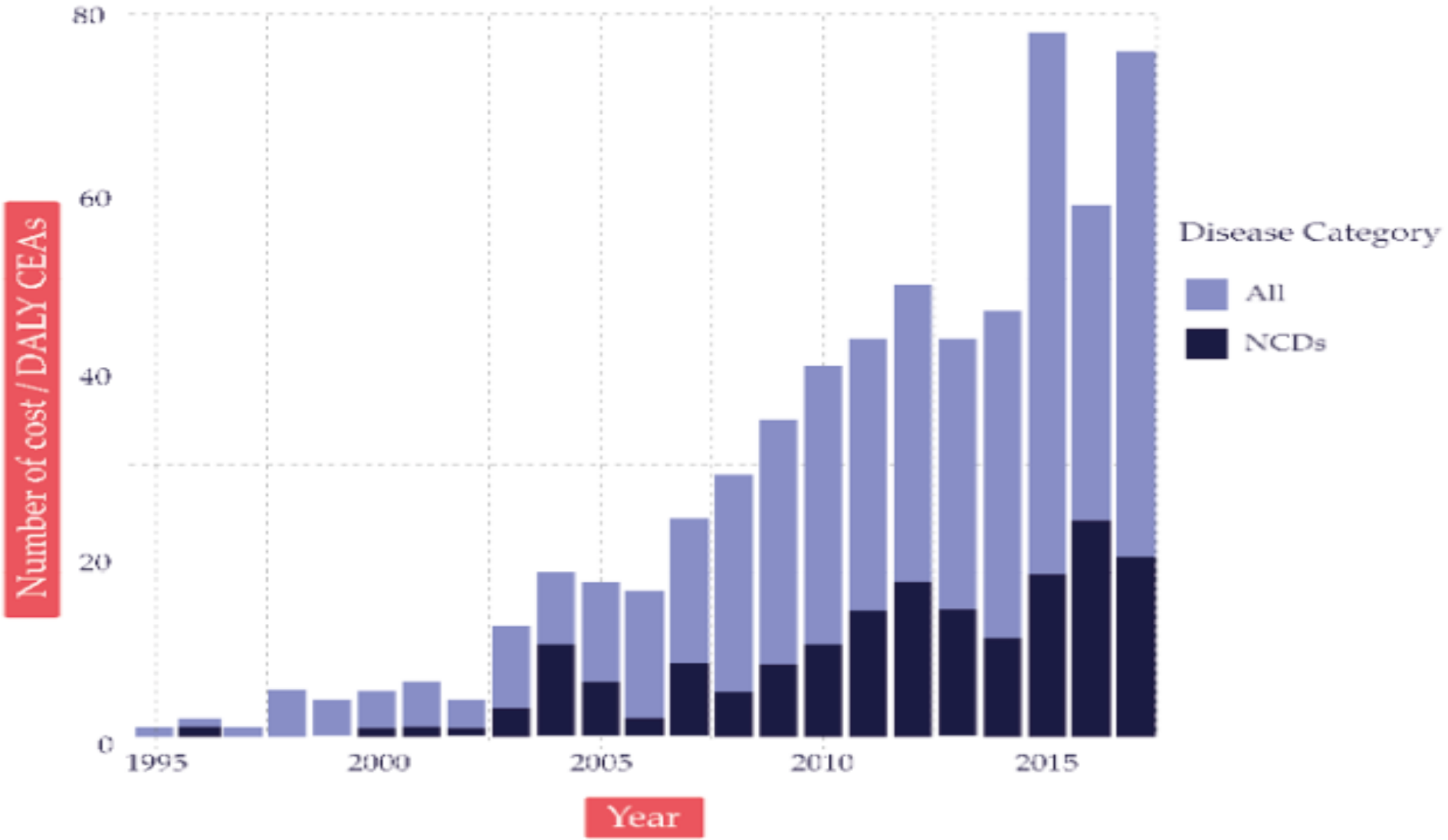
Transferability of cost data

- Cost=Quantity * Price
- Transferability of cost data requires separately considering the quantity of resources needed for the intervention and its monetary value
- Q and P are rarely equivalent across two settings, unless medical resources, technologies and practices are the same
- Q: in the original study country, a comparator (standard of care) may consist in one visit at a primary health care centres while in your country it may be two or three visits
- P can also differ across countries

Provider and decision-maker acceptability

- An intervention may be cost effective in one setting and not in another solely based on difference in the decision maker willingness to pay threshold
- More than EE information is needed
  - Values and preferences placed on alternative interventions by providers and patients
  - Literature, panel members, external stakeholder consultations

Number of CEA reporting cost per DALY averted has increased



DALY : Disability-adjusted life year
CEAs : Cost-effectiveness analyses
NCDs : Non-communicable diseases

Geographic distribution of cost-per-DALY averted studies for NCDs

Different types of EE and their use case

	CEA	CUA	CBA
Efficiency type	**Technical efficiency:** How to use health care resources in a way that maximize the output for the cost	**Allocative efficiency:** Considers optimal allocation of health sector resources in a way that results in maximized health gain for a given level of expenditure *also referred as CEA	**Allocative efficiency of government budget:** Optimal allocation of resources or net benefit of different activities can be compared including to those outside health sectors
Use case	To compare the outcome of a health intervention to alternative intervention e.g. a range of different malaria interventions when investigating the cost per case averted	To inform health policy when comparing different health interventions that fall within the same budget or benefit package. e.g. deciding a new vaccine should be adopted by the national health benefit package	Cross-sectoral comparisons for reallocation of resources to the health sector; To evaluate health policy where health outcomes metrics are not suitable and in certain complex intervention contexts e.g. considering COVID-19 PHSM in terms of health and non health outcomes