

# Use of MCDA in HTA, Coverage and Reimbursement Decision-Making: *Experience and Insights from EMEA, Latin America and Asia-Pacific*

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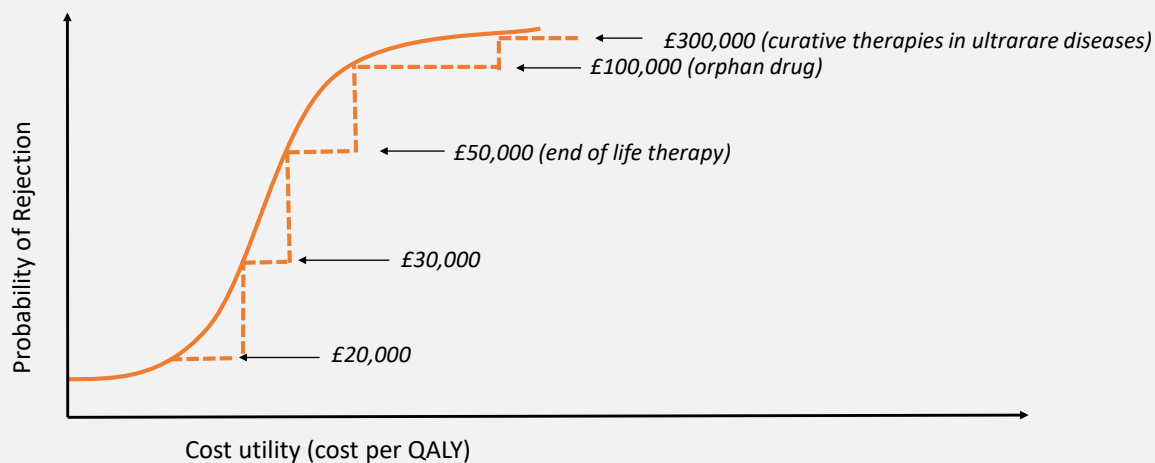
## Traditional concept of value judgement

Value based price =

- New technology is cost-effective at a given price
- The price premium of a new technology can be justified by additional health gain or savings in the health care budget

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## NICE approach in 2019



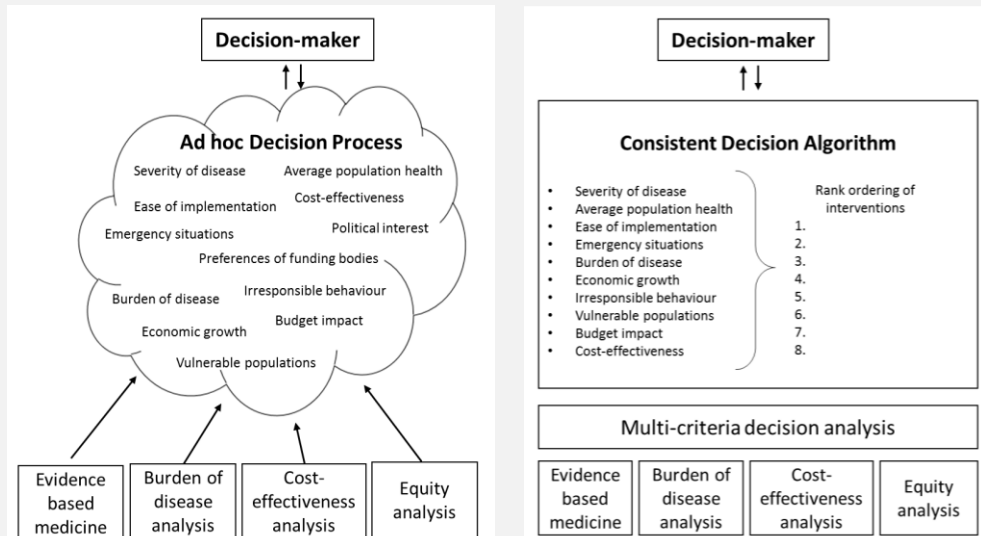
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## Extended value frameworks



Ref: Lakdawallan DN, Doshi JA, Garrison LP, Phelps CE, Basu A, Danzon PM. Defining Elements of Value in Health Care—A Health Economics Approach: An ISPOR Special Task Force Report [3]. Value in Health 2018 21, 131-139.

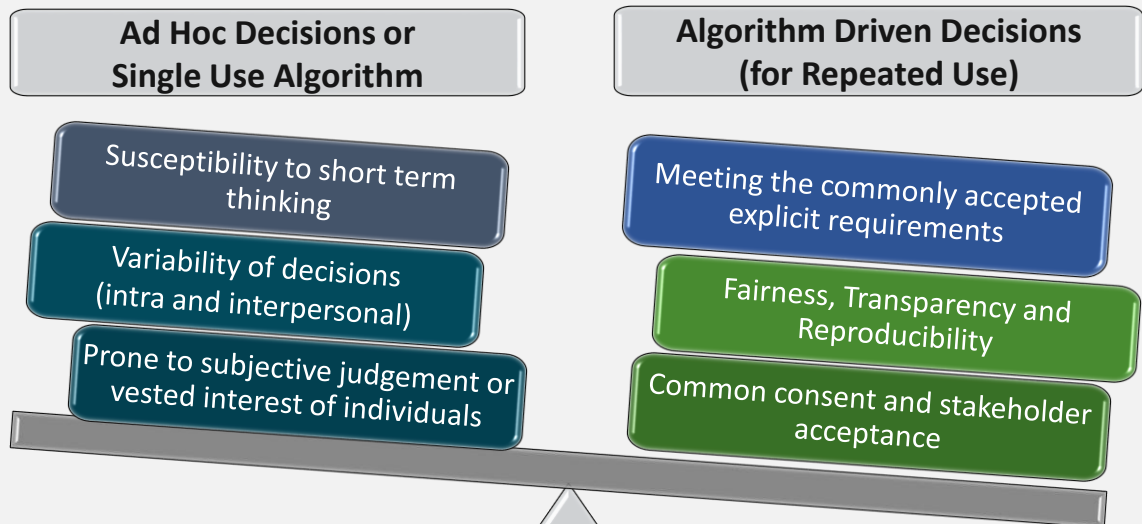
## How MCDA Improves the Consistency and Transparency of Policy Decisions?



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Adapted from: Baltussen R, Niessen L. Priority setting of health interventions: the need for multi-criteria decision analysis. *Cost Eff Resour Alloc.* 2006. 21;4:14.

## How to deal with multiple criteria in decision-making in developing countries?



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## Incentives of different stakeholders in implementing MCDA

Public policymakers

- Positive discrimination of vulnerable patient groups
- Explicit criteria for value based and patient centric health care
- Increased transparency and objectivity of policy decisions

- Clear market access criteria
- Reduced impact cost-effectiveness and budget impact in policy decisions
- More emphasis on other value propositions (e.g. innovation and clinical benefits)

Pharmaceutical manufacturers

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## MCDA implementation in developing countries

- Limited public resources for foundation research in MCDA
- (Political leaders may not be interested in evidence based policy-making)
- Main sponsors of MCDA initiatives in health care: pharmaceutical countries

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## FIFARMA recommended MCDA criteria for healthcare decision-making

	Description of criteria
Quantitative criterion	<b>Added therapeutic benefit/innovation<sup>a</sup></b> Improved efficacy/effectiveness Improved safety Unmet medical need addressed by new technology Quality of life (patients, families, caregivers)
	<b>Economic impact<sup>b</sup></b> Economic impact from a societal perspective Local health system priorities Disease severity/progression <sup>c</sup> Health prioritization <sup>d</sup> Clinical guidelines and international health standards Completeness in international and local clinical practice guidelines Medications approved by globally recognized healthcare organizations <sup>e</sup>
	Quality of evidence Integrity and consistency of evidence Relevance and validity of evidence
	<b>Equity<sup>f</sup></b> Patient access
	<b>Other</b> Sustainability of manufacturer business practices <sup>g</sup> Capacity of local system to use appropriate interventions
	a) Innovation (e.g., breakthrough designation therapy) can be captured via subcriteria (e.g., effectiveness, safety, QoL) or an as an <b>independent criterion including broader definition (e.g., training and publications through clinical trials in country).</b>
	<b>b) Economic impact refers to net costs considering components such as lost productivity costs avoided (patients, families, caregivers) and improved efficiency in healthcare delivery.</b>
	c) Disease severity/progression should consider survival prognosis with current standard of care, disease morbidity/clinical disability.
	d) Consideration of disease in regard to local system's public health priorities.
	<b>e) World Health Organization, Food &amp; Drug Administration, European Medical Association.</b>
	<b>f) Equity means all patients have access to medications and treatment facilities regardless of income, gender, race, age, or any other status.</b>
	<b>g) Sustainability of manufacturer business practices refers to environmental aspects as well as consistency and reliability in the production of technologies.</b>

Ref: Drake J, de Hart JCM, Monleón C, Toro W, Valentim J. Utilization of multiple-criteria decision analysis (MCDA) to support healthcare decision-making FIFARMA, 2016. *Journal of Market Access & Health Policy*. 2017. 5. 1360545.

## Guidance toward the implementation of MCDA framework in developing countries

1. MCDA should address a well-defined decision problem which is harmonized with the overall health system objectives
2. MCDA should be an unbiased and transparent exercise
3. MCDA should provide incentives to all stakeholders
- ...
7. MCDA development should be based upon the current decision-making criteria
8. Representatives from all key stakeholder groups should participate in the design of the MCDA
- ...

Ref: Inotai A, Nguyen HT, Hidayat B, Nurgozhin T, Kiet PHT, Campbell JD, Németh B, Maniadakis N, Brixner D, Wijaya K, Kaló Z. Guidance towards the Implementation of Multi-Criteria Decision Analysis Framework in Developing Countries: Lessons Learned from Pilot Policy Research Projects to Apply MCDA for Off-Patent Pharmaceuticals in Indonesia, Kazakhstan and Vietnam. *Expert Rev Pharm Outcome Res*, 2018

## Conclusion for MDCA implementation in developing countries to support health care decisions

- Appropriate MCDA tools (developed for repeated use) may improve the transparency and evidence base and reduce the opportunity cost of health policy decisions
- Biased policy MCDA tools may increase the opportunity cost of policy decisions and/or may increase corruption
- MDCA cannot solve all the problems
- MCDAs should be
  1. pragmatic and transparent
  2. built on consensus of multiple stakeholders
  3. start from how decisions are made today

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