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Use of MCDA in HTA, Coverage and Reimbursement Decision-Making

Experiences and Insights from EMEA, Latin America and Asia-Pacific

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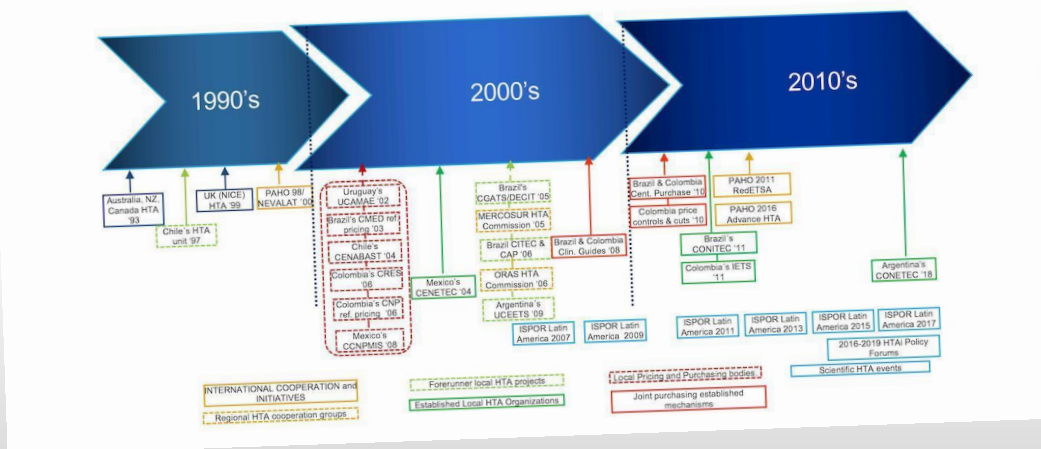
- The views expressed at this presentation are my own.

Some facts about Latin America

- 20 Countries
- Population (2018): 641,357,517 - 0,9% annual growth.
- Projected growth by 2030: **-2,8%**
- GDP per capita (PPP): \$ 16,587
- Highly fragmented Healthcare Systems
- Universal Health Coverage index: **70%**



Source of data: The World Bank Country Database and The World Health Organization UHC fact sheets.

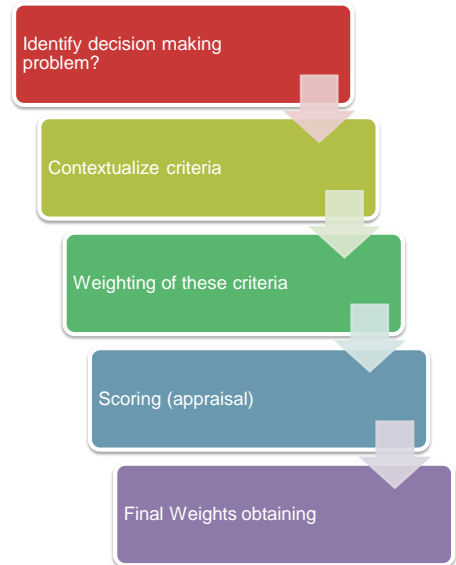


Giardino, R et al. Val Health Reg Issue. 2019 (in Press)

HTA and MCDA to support healthcare decision

- HTA has no formal role in the decision-making process¹
- Only applied for a selected group of technologies (high cost)¹
- Limitation in HTA capacity building¹
- Emphasis on cost-effectiveness (and ICER) as decision-making rule^{1,2}
- Interest of include more decision-making criteria (unmet medical need, relevance to priority setting, budget impact)¹

Currently MCDA is applied only in a few cases



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1. Rosselli D, et al. *Val Health Reg Issue*. 2017. 14C. 20-27
 2. Drake J, et al. *Jrnl of Market Access & Health Policy*. 2017. 5. 1360545

Adapted from *Evidence and Value: Impact on Decision Making (EVIDEM)*

FIFARMA recommended MCDA criteria ...

- Cost-effectiveness excludes other important factors such as: innovation, disease severity, size of patient population, equity, or clinical guidelines.
- Countries with Cost/QALY, have less access to “new cancer drugs” and/or are adopted more slowly at lower rates.

MCDA as a deliberative tool in healthcare decision-making

- Decision makers can find this “partial” [deliberative] form of MCDA a useful way of summarizing the relevant evidence, to help structure their deliberations about which alternatives are best.

MCDA criteria for inclusion

- Limits Cost-effectiveness from their criteria, given economic impact and effectiveness are already listed as separate criteria.

	Description of criteria
Quantitative criterion	<p>Added therapeutic benefit/innovation^a Improved efficacy/effectiveness Improved safety Unmet medical need addressed by new technology Quality of life (patients, families, caregivers)</p> <p>Economic impact^b Economic impact from a societal perspective Local health system priorities Disease severity/progression^c Health prioritization^d Clinical guidelines and international health standards Completeness in international and local clinical practice guidelines Medications approved by globally recognized healthcare organizations^e Quality of evidence Integrity and consistency of evidence Relevance and validity of evidence</p>
Qualitative criterion	<p>Equity^f Patient access</p> <p>Other Sustainability of manufacturer business practices^g Capacity of local system to use appropriate interventions</p>

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Drake J, et al. *Jrnl of Market Access & Health Policy*. 2017. 5. 1360545

Not only the “pharmaceutical” industry is interested in MCDA..

- *To value the innovation, are important the cost effectiveness and budget impact analysis. The societal perspective support the considerations of how much health the patient gains and what is the cost of that gain¹*
- Policymakers are paying attention to alternative approaches including MCDA and “Value Frameworks” ^{1,2}
- MCDA is gaining interest among decision makers, as it could value and prioritize different health interventions where resource allocation is difficult²

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1. Data from ISPOR Latin America Regional Health Policy Summit. September 2019, Bogota.
2. Rosselli D, et al. Val Health Reg Issue. 2017. 14C. 20-27

MCDA for Transparent resource allocation in Colombia: results from a Stakeholder panel

- 1. completeness and consistency of reporting evidence
 2. relevance and validity of evidence;
 3. disease severity;
 4. size of population affected by disease;
 5. current clinical guidelines;
 6. current intervention limitations;
 7. improvement of efficacy/ effectiveness;
 8. improvement of safety and tolerability;
 9. improvement of patient-reported outcomes;
 10. public health interest; type of medical service;
 11. budget impact on health plan;
 12. cost-effectiveness of intervention, attention to vulnerable groups of population;
 13. attention to differential needs for health/health care

Source: adapted from Goetghebeur et al (2012)

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Castro H, et al. Cost Effect Resour Alloc 2018, 16(Suppl 1):47
 Castro H, et al. Intl Jnl of Technology Assessment in Health Care, 32(04), 307–314

Exploring the Potential Use of MCDA in Central America and the Caribbean

- Multi-stakeholder panel w/ representatives from 12 Countries:
 - Is MCDA perceived as a robust tool to be incorporated into local decision-making processes for priority setting?
 - In which ongoing decision-making processes can MCDA be most useful and feasible to implement?

Despite limitations in eliciting weights and scoring, the group expressed that MCDA seems reasonably robust to be implemented as a tool for local decision-making processes.

Broader consensus was achieved in the use of MCDA to inform priorities for public health planning, which in some countries is called the National Health Plan or National Development Plan for Health. Representatives emphasized the relevance for prioritizing treatments to be included in the coverage schemes and for joint purchasing.



Table 3. Examples of recommended or actual real-world utilization of MCDA in LATAM.

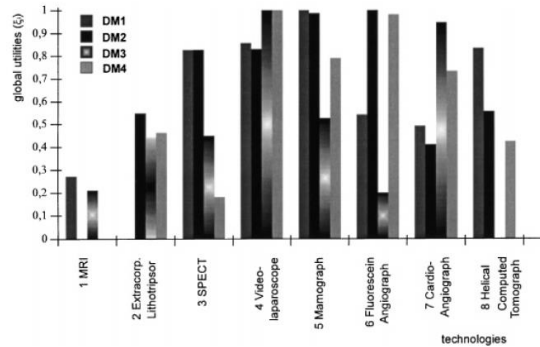
Country	Implementation progress by stakeholders	Source
Brazil	a. MCDA proposal for rare disease, Interfarma b. MCDA used for hospital investment, RJ Uni. Hospital	Brito et al. [33] Nobre et al. [34]
Argentina	Incorporation of MCDA into the SUMAR Project, Ministry of Health	Pichon-Riviere [35]
Colombia	Pilot completed in 2013 and MCDA implemented for healthcare prioritization, IETS	Jaramillo [36]
Chile	Utilization of MCDA in considering tender offers, University of Chile Hospital	'Informe de Evaluación' [37]
Dominican Republic	Seeking insight from external consultants, Ministry of Public Health	Espinoza [38]
Ecuador	Prioritization process for HTA utilizing MCDA recommended, Ministry of Public Health	Sotomayer et al. [39]

Benefit, risk and cost of new oral anticoagulants and warfarin in atrial fibrillation; A multicriteria decision analysis

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Alimi et al. BMC Public Health (2016) 16:221
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BMC Public Health

RESEARCH ARTICLE

Open Access



A multi-criteria decision analysis approach to assessing malaria risk in northern South America

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Fonseca et al, *Statist. Med.* 18, 3345|3354 (1999)

ISPOR Is there a future for MCDA in the Region?

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Box 1: Components of an effective and fair HTA-informed priority-setting process

- Specific legislation and structures to oversee the use of HTA to inform government decision-making
- Specific legislation and structures to register new health products that are efficacious and safe to use
- A systematic process that involves a wide range of stakeholders in identifying policy-relevant interventions for assessment
- Economic analysis and clinical assessment of priority interventions that use sound methods and are based on criteria that conform to social and health objectives
- Budget impact analyses that project the financial impact of new interventions
- A deliberative process that combines the findings of the above analyses with more subjective criteria generated through consultation, and makes recommendations
- A government decision-making process that assesses these recommendations and decides whether to fund new interventions under the public budget
- An appeals and evaluation process that allows government decisions to be challenged and assesses the impacts of newly funded interventions
- A mechanism to adjust and update recommendations on the basis of new information

Sources: [2, 5, 9, 26, 27]

- MCDA is an **important** decision-making approach that allow for **inclusion** of a variety of **value elements** in process that can be made **transparent** to stakeholders ¹
- MCDA for HTA emphasizes fair process, argumentation, iteration and systematic thinking
- Priority setting tends to be more complex in lower- and middle-income countries (LMICs)
- It is important to learn the lessons and be aware of the current, more general methodological debates in the application of MCDA for HTA ²

1. Garrison L, *Value in Health* 21(2018)124 – 1 3 0
2. Marsh et al. *Cost Ef Resour Alloc* 2018, 16(Suppl 1):43

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