

VALUE OF REFLECTIVE MULTI CRITERIA DECISION ANALYSIS (MCDA) DRUG EVALUATION AMONG THERAPEUTIC POSITIONING REPORT EVALUATORS FROM THE SPANISH AGENCY OF MEDICINES (AEMPS)

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BACKGROUND & OBJECTIVES

- EVIDEM is a reflective multicriteria approach [1,2,3] designed to support the culture of reasonable decision-making by promoting procedural and substantive legitimacy. To help ensure that decisions are based on relevant reasons, EVIDEM provides a set of generic decision criteria derived from the ethical imperatives that underlie the common goal of healthcare. This represents a generic interpretive frame (reflective MCDA) that can be used to elicit individual values and facilitate sharing of diverse perspectives during committee deliberations or for other applications. The aim of this work was to assess the value of applying reflective MCDA among the evaluators of drug Therapeutic Positioning Reports (TPR) in Spain.

METHODS

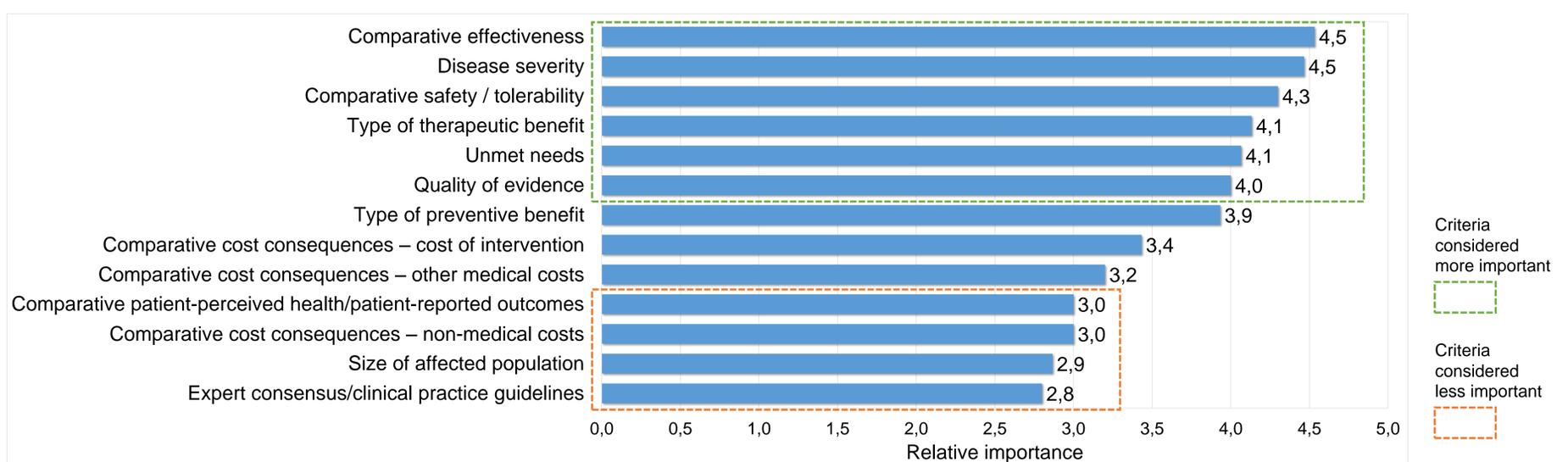
- TRP are evaluation reports performed by the AEMPS to support P&R in Spain. Healthcare professionals involved in the generation of TPR participated in a MCDA session using the EVIDEM (v 4.0) framework. TPRs currently consider the assessment of “comparative effectiveness”, “safety”, “criteria of use” and “follow-up” for the drug under assessment. In each session, the EVIDEM criteria were presented and weighted using a direct rating scale (1: low relative importance; 5: high relative importance). An example of the assessment of a biological drug in psoriasis was used to rate the evidence matrix and numbers were used to establish a reflective discussion among participants.

RESULTS

- A total of 15 AEMPS representatives participated in the session, of which 14 (93%) were pharmacists and 1 (7%) was clinician.
- Using a direct rating scale, the criteria considered most important (≥ 4.0 points) were: “comparative effectiveness” (4.5), “disease severity” (4.5), “comparative safety/tolerability” (4.3), “type of therapeutic benefit” (4.1), “unmet needs” (4.1) and “quality of evidence” (4.0). The criteria considered less important (≤ 3.0) were “comparative patient-perceived health/patient-reported outcomes” (3.0), “comparative cost consequences – non-medical costs” (3.0), “size of affected population” (2.9) and “expert consensus/clinical practice guidelines” (2.8).

Criteria weighting

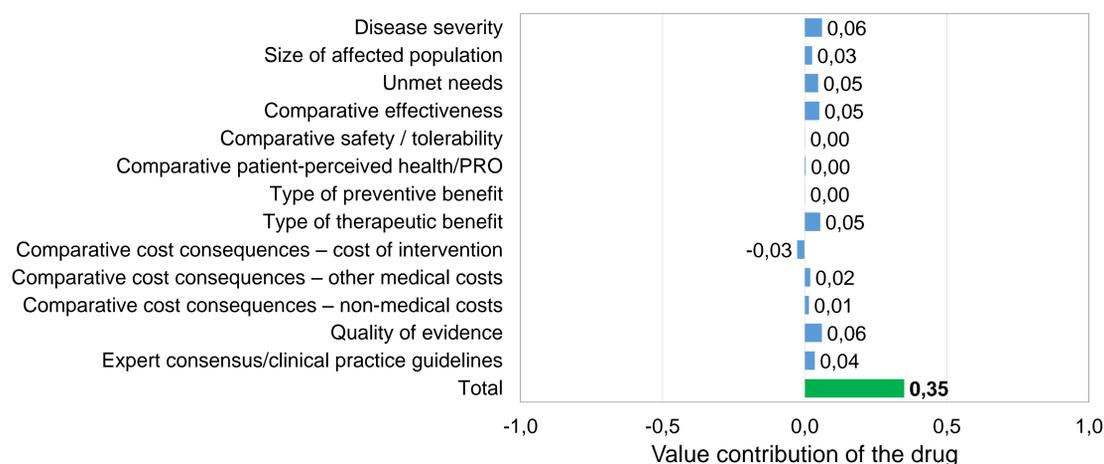
Fig. 1: Results of criteria weighting through a direct rating scale



- An example of the assessment of a biological drug in psoriasis was used to rate the evidence matrix. The scores assigned to each criterion regarding the comparative drug assessment were discussed to understand the value contribution of each criteria to the overall drug value.

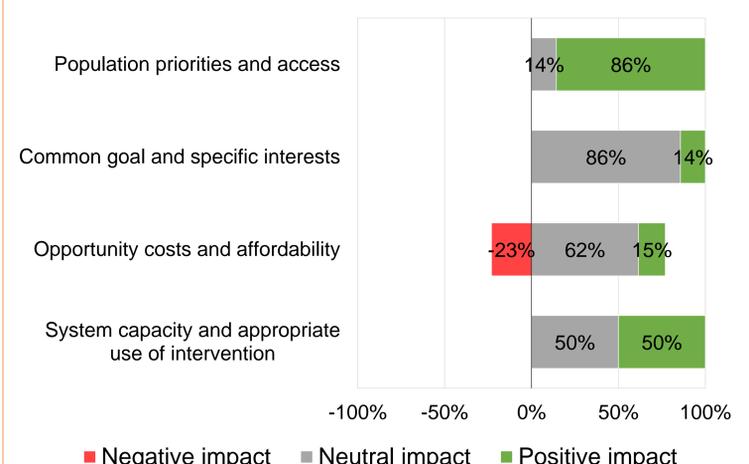
Value contribution of quantitative criteria

Fig. 2: Results of the quantitative criteria scores of the treatment for psoriasis used as a example



Value contribution of qualitative criteria

Fig. 5: Results of the qualitative criteria scores of the treatment for psoriasis used as a example



- Reflective multicriteria analysis encouraged the participants to reflect on the evidence and make a judgement on its meaning using an interpretative scoring scale and also to provide a narrative to explain the reasoning that underlies the score. Scores were thus a quantitative representation of an interpretation of the evidence, designed to help express and share the reasoning, not a mathematical transformation of data.

CONCLUSIONS

The relative importance assigned by participants to the priority criteria used in TPR (comparative effectiveness and safety) was highly consistent. Additional criteria not included explicitly in TPR, such as, “disease severity”, “quality of evidence” and “unmet needs” were also classified as very relevant. In general, reflective MCDA was considered as a positive methodology which could add transparent reasoning behind evaluators’ discussions during TPR generation. Reflective discussion on the visual representation of the scores was considered highly positive among the participants to assess the value of new treatments.

REFERENCES

- [1] Goetghebeur MM, Wagner M, Khoury H, Levitt RJ, Erickson LJ, Rindress D. Bridging health technology assessment (HTA) and efficient health care decision making with multicriteria decision analysis (MCDA): applying the EVIDEM framework to medicines appraisal. *Med Decis Making*. 2012 Mar-Apr; 32(2):376-88. [2] Goetghebeur MM, Wagner M, Khoury H, Rindress D, Grégoire JP, Deal C. Combining multicriteria decision analysis, ethics and health technology assessment: applying the EVIDEM decision-making framework to growth hormone for Turner syndrome patients. *Cost Eff Resour Alloc*. 2010 Apr 8; 8:4. [3] Goetghebeur MM, Wagner M, Khoury H, Levitt RJ, Erickson LJ, Rindress D. Evidence and Value: Impact on Decision-Making--the EVIDEM framework and potential applications. *BMC Health Serv Res*. 2008 Dec 22; 8:270.