

F Maraiki^{1,3}, T Elhassan², S Bazarbashi², P Scuffham^{3,4}, H Tuffaha⁵

¹ Pharmaceutical Care Division, King Faisal Hospital and Research Centre, Riyadh, Saudi Arabia.

² Cancer Centre of Excellence, King Faisal Hospital and Research Centre, Riyadh, Saudi Arabia.

³ Centre for Applied Health Economics, School of Medicine, Griffith University, Nathan, Queensland, Australia.

⁴ Menzies Health Institute, Griffith University, Gold Coast, Queensland, Australia

⁵ Centre for the Business and Economics of Health, The University of Queensland, Brisbane, Queensland, Australia.

INTRODUCTION

The emergence of national HTA agencies has increased the use of economic evaluation.

There are international economic tools and checklists to assess health technologies; however, applying these tools in the context of KSA can be challenging given the unique features of the healthcare structure in the kingdom.

OBJECTIVE

To develop a country specific approach for conducting economic evaluation as a specific component of HTA to determine the value for money of new interventions.

METHOD

A real-time Delphi survey was conducted using CHEERS as the foundation of the guideline.

The consensus was obtained for the relevance to Saudi healthcare system.

Using 9-point Likert scale: Agreement threshold 80% and interquartile range < 3.

Recommendation with “no consensus”: Interim analysis and further analysis

A natural language process: investigate the relationship between experts’ comments and consensus decisions.

RESULTS

A total of 78% participated, with an average response progress rate of 97.2%.

The guidelines concluded with 21 recommendations for 17 items and a consensus on 76% of the recommendations.

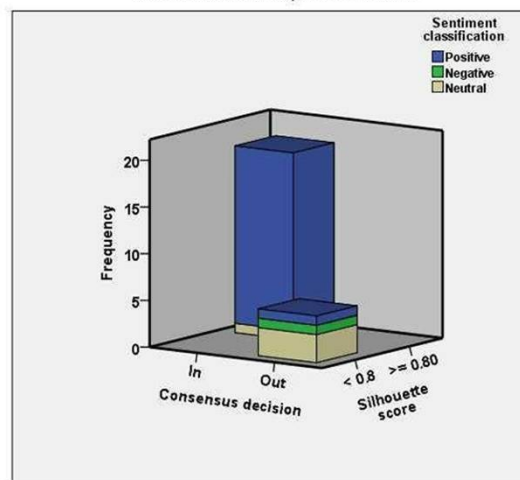
Recommendations with “no consensus:

- Interim analysis: 63% adjustment rate (further clarification 65%).
- Further analysis: no difference in consensus between groups

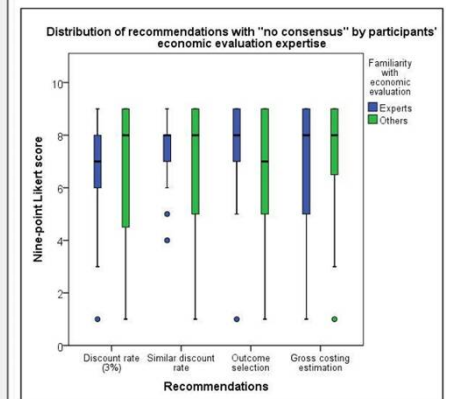
Recommendations remained undetermined: Discount rate, Using the same rate for both health benefits and costs, Outcome selection, Use of gross costing.

The NLP results supported the consensus decision.

Consensus decision stratified by Silhouette score and sentiment classifications for expert’s comments



Recommendations of final decisions (consensus “in” or “out”) based on the experts’ ratings and NLP of experts’ comments.



Distribution of recommendations with “no consensus” by participants’ economic evaluation expertise.

CONCLUSIONS

The expert consensus contributed to the development of informative guidelines relevant to the KSA.

The guideline serves as a reference case, providing a foundation for HTA practices, reimbursement decisions and future research for the KSA and neighbouring countries.

REFERENCES

Submitted for publication

CONTACT INFORMATION

Fatma Maraiki. King Faisal Hospital and Research Centre, Saudi Arabia. Email: f_maraiki@hotmail.com.