

# National Health Technology Assessment in Turkey After a Decade:

## Are Key Principles Followed?

Saygın Avşar T<sup>1</sup>, Yıldırım HH<sup>2</sup>

<sup>1</sup>University College London, West Drayton, London, UK, t.avsar@ucl.ac.uk <sup>2</sup>University of Health Sciences & Turkey Health Policies Institute, Ankara, Turkey



### Introduction

The Health Technology Assessment (HTA) agency of the Turkish Ministry of Health (MoH) was first established in 2012 [1]. The country does not have detailed national guidelines, but the National HTA Directive sets out the process of undertaking HTA [2]. The strategy document prepared by the national HTA agency for 2019-2023 lists compliance with the key HTA principles developed by Drummond as a strategy for the institutionalisation of HTA in the country [3]. The current study aimed to provide an overview of the country's HTA progress since establishing the agency a decade ago, critically reviewing the National HTA Directive and the national HTA reports published by the Turkish MoH's HTA agency.

### Methods

National HTA Directive and the HTA reports were accessed on the national HTA agency's website. First, the National HTA Directive was assessed to understand whether the key principles of HTA were included. Second, the compliance of the HTA reports with the principles, and the Directive were evaluated. The principles published by Drummond et al. were chosen as an assessment tool because the agency's strategy document included them as guiding principles. Assessments were completed by two researchers independently, and any discrepancies were dissolved through discussion.

### Results

The study included all publicly available national HTA reports (n=8). Most reports (n=5) were published before the establishment of the National HTA Directive in 2019. The reports focused on various topics, including foetal anomalies, cancer, and obesity. The decision-maker was not stated in any of the reports, and none was peer-reviewed. A summary of the assessment of the Directive and HTA reports against the key principles is provided in Table 2. The overall compliance with the key principles was poor.

Table 1. Summary of the included HTA reports

First author & year	Disease area	Intervention	Comparator	Economic evaluation conducted
Tecirli 2020	Fetal chromosomal anomalies	Combined test (CT) only	CT+ triple test, CT+ quadruple test, CT+ cfDNA	Cost-effectiveness analysis
Arslan 2019	Sepsis	Molecular rapid tests + Blood culture test	Blood culture test	Cost-utility
Mahagaonkar 2019	Rheumatoid arthritis	bDMARDs	csDMARDs	Cost analysis
Kockaya 2018	Cancer	Cytoreductive surgery + hyperthermic intraperitoneal chemotherapy	Cytoreductive surgery alone	None
Ozturk 2018	Male circumcision	Single-use devices that require minimal surgical implementation	Traditional surgery	Cost analysis
Gunal 2017	Renal insufficiency	Peritoneal dialysis	Haemodialysis	Cost-utility
Sener* 2014	Obesity	Surgery for obesity	No surgery	Cost analysis
Karadayı 2013 (short report)	Erectile dysfunction	Electroshock wave treatment (ESW)	Usual care (not defined)	None

Table 2. Compliance with Drummond's key principles of HTA

STRUCTURE OF HTA	Included in Directive?	Compliance in HTA reports
1 Was the goal and scope of the HTA explicit and relevant to its use?	Partly	50%
2 Was the HTA report an unbiased and transparent exercise?	No	6%
3 Did the HTA report include all relevant technologies?	Partly	63%
4 Was there a clear system for setting priorities for HTA?	Partly	0%
METHODS OF HTA		
5 Did the HTA report incorporate appropriate methods for assessing costs and benefits?	Partly	69%
6 Did the HTA consider a wide range of evidence and outcomes?	Yes	25%
7 Was a full societal perspective considered? Was not having a societal perspective justified?	No	13%
8 Was uncertainty surrounding estimates explicitly characterised?	No	13%
9 Were issues of generalizability and transferability considered and addressed?	No	0%
PROCESSES FOR CONDUCTING HTA		
10 Were all key stakeholder groups actively engaged?	Yes	50%
11 Have all available data been sought actively by those undertaking HTA?	No	13%
12 Have the implementation of HTA findings been monitored?	Yes	Can't tell
USE OF HTA IN DECISION MAKING		
13 Was the HTA published before the implementation of the technology?	No	13%
14 Were the HTA findings communicated appropriately to different decision makers?	Partly	Can't tell
15 Was the link between HTA findings and decision-making processes transparent and clearly defined?	No	0%
Overall compliance with the principles	Poor	Poor
	30%	25%

### Conclusion

The role of HTA in healthcare decision-making in Turkey remains unclear. The study findings provide important learnings for the HTA agencies, researchers, and policymakers in countries where HTA is developing. The link between HTA findings and decision-making processes needs to be explicitly defined and formalised. The HTA reports published by the national HTA agency of the Ministry of Health lack consistency, and significant variations exist in how the evidence is gathered and assessed. There is an urgent need to establish and adopt national HTA guidelines that are at the international standards.

### References

- Research Development and Health Technology Evaluation Department, National Health Technology Assessment Strategy (2019-2023). 2019, Ministry of Health.
- Turkish Ministry of Health (MoH), National Health Technology Assessment Directive. 2019.
- Drummond, M.F., et al., Key principles for the improved conduct of health technology assessments for resource allocation decisions. International journal of technology assessment in health care, 2008. 24(3): p. 244-258.