

A Roadmap Towards Implementing Health Technology Assessment (HTA) in Oman

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INTRODUCTION

Health technologies are advancing rapidly and becoming more expensive posing a challenge for health systems all over the world. Health technology assessment (HTA) helps to use resources effectively and to make evidence-informed decisions about the worth of health technologies.

In line with “Oman Vision 2040”, the country is committed to establishing a transparent healthcare system that promotes justice and delivers high-quality services. Despite being a high-income country, Oman faces challenges such as increased treatment costs and a rapid pace of innovation. However, the implementation of HTA can address these challenges by providing policymakers with the necessary evidence to guide reimbursement of new health technologies and facilitate the establishment of a transparent and responsive healthcare system.

OBJECTIVES

Our objective is to create a customized HTA implementation roadmap for Oman, by identifying the gap between the current HTA state and the long-term goals of HTA implementation.

METHODS

A survey was conducted on the 27th of October in Muscat during an advanced HTA training program. It was disseminated electronically through a proprietary platform. The survey was conducted to assess the current and preferred long-term status of HTA in Oman by using a scorecard designed to support the formulation of HTA roadmaps in developing countries. The scorecard assessed 8 areas: capacity building, HTA financing, process and organizational structure, scope of HTA, decision criteria, standardization of methodology, use of local data and international collaboration; (Kalo, et al., 2016). Draft recommendations were developed based on the survey responses that were validated by high-level decision-makers in a round table discussion to develop an HTA implementation roadmap for Oman.

RESULTS

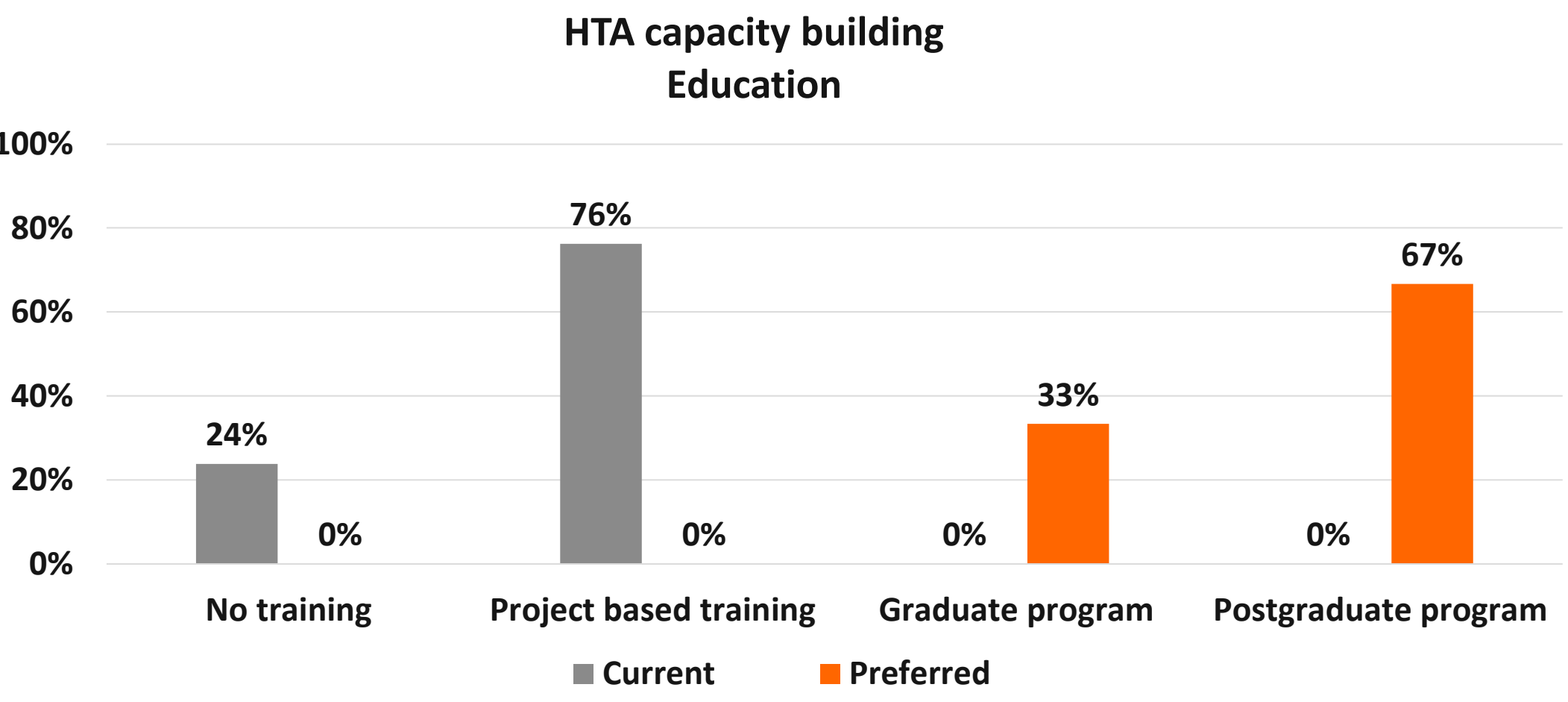
1. Survey results

Demographics

21 local stakeholders filled in the survey of which 20 of them represented the public sector (95%). Most of the respondents had their primary education in pharmaceutical sciences (81%). Most respondents’ ages ranged from 30 to 50 years old (90.5%).

HTA capacity building programs

HTA workshops or short courses were the most common form of HTA education in Oman (76%), which may not be sufficient to induce hands-on training experience. While 67% of the respondents support the establishment of post-graduate HTA training programs in 10 years.



HTA funding

Respondents reported current limited funding. Most respondents would prefer an increase in funding for critical appraisal. For HTA research funding, most respondents (95%) would prefer to see at least sufficient public funding, of which 38% opted for dominant public funding.

Legislation on HTA

More than half of the respondents indicated that HTA results currently have no formal role in decision-making, and more than 40% reported that only international evidence is considered.

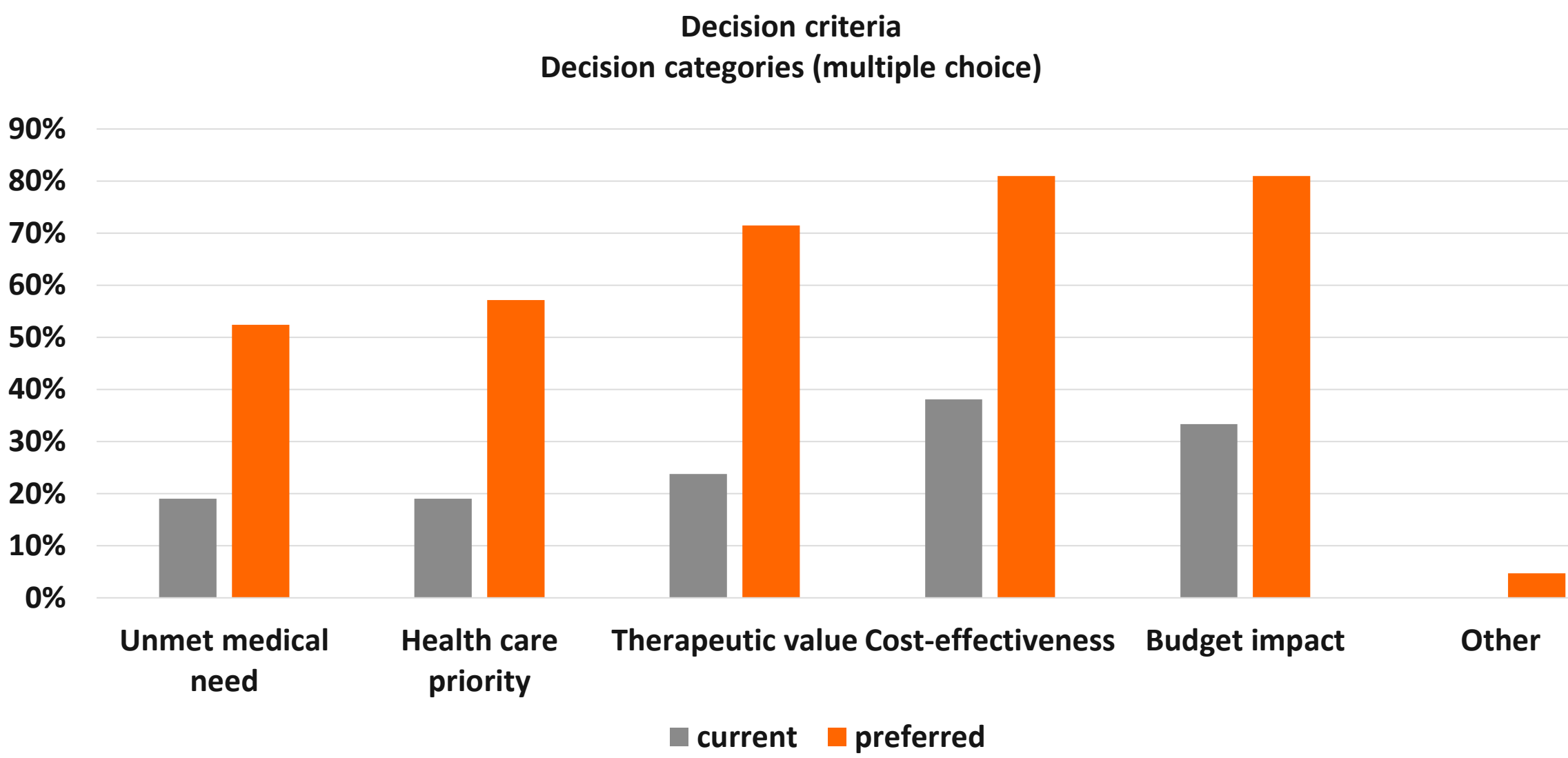
Almost all respondents (96%) highlighted the need of local HTA evidence in the future. Regarding the organizational structure, the presence of several HTA bodies with central coordination (43%) was the preferred option or establishing a public HTA institute with academic support (38%).

Scope of HTA

Forty-eight percent of the respondents reported that currently HTA is mainly applied to pharmaceuticals. Most respondents would prefer extending the scope of HTA to medical devices (86%), prevention programs (90%), and surgical interventions (81%). Almost all respondents (95%) stated that in the future HTA should focus on the revision of previous reimbursement decisions and not only on the assessment of new health technologies

Decision criteria

According to respondents’ opinion, the current most common decision criteria in Oman is cost-effectiveness (38%), followed by budget impact (33%). The role of other criteria should also be increased, such as therapeutic value (from 24% to 71%), health care priority (from 19% to 57%) and unmet medical need (from 19% to 52%).

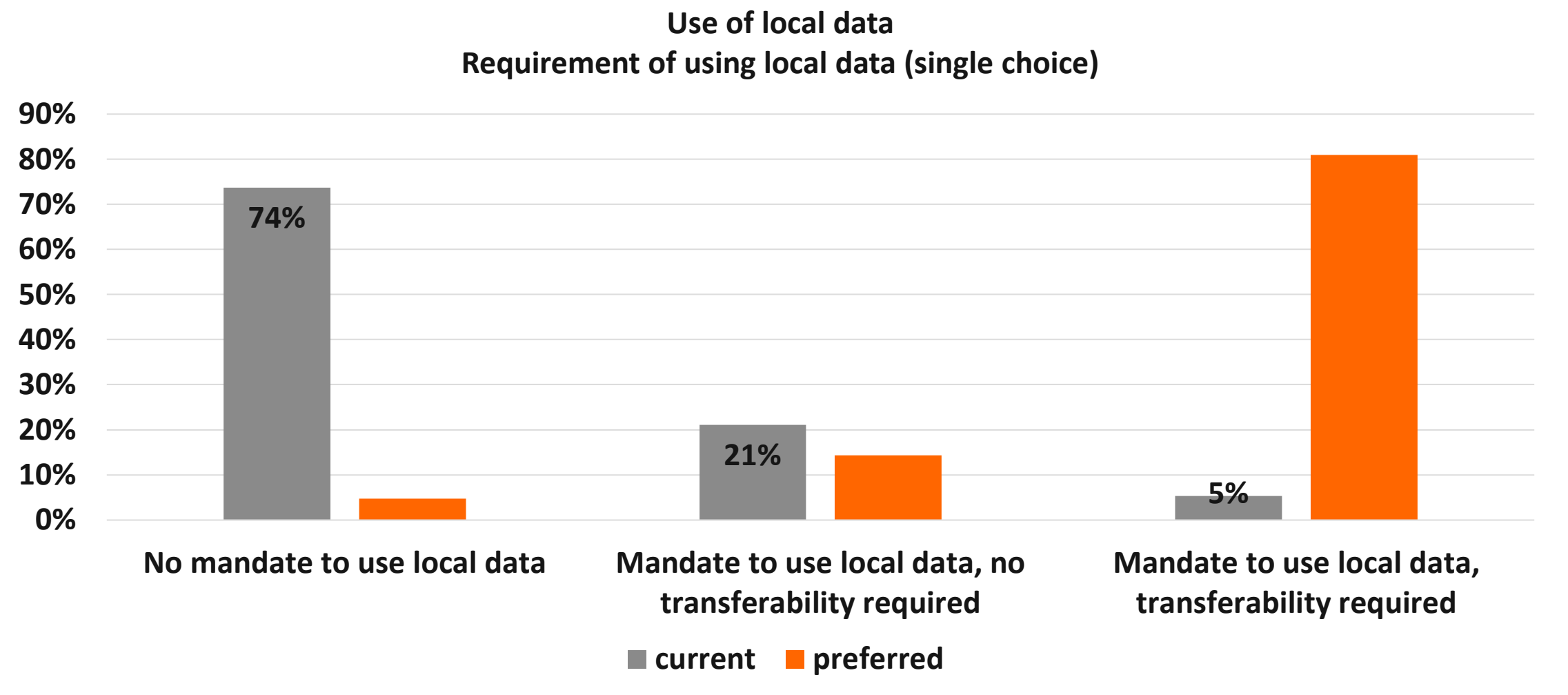


The majority (81%) of the respondents indicated that currently there is no clear cost-effectiveness threshold. 95% of respondents preferred having a threshold in the future. 14% would prefer an implicit threshold, while most of them (57%) preferred explicit soft thresholds. Almost all the respondents (95%) indicated that multi-criteria decision analysis (MCDA) would be a preferred method in the future HTA framework.

Quality and transparency

Eighty-six percent indicated that currently no quality elements are applied. In the future, 76% of respondents preferred having a published critical appraisal checklist, 52% preferred published methodological guidelines for HTA documents, and 33% preferred regular follow-up research on previous HTA recommendations. 90% of the respondents preferred having full transparency, where both the HTA body’s recommendations and the related appraisal reports should be publicly available.

Local data



Almost all respondents (95%) preferred relying on local data, 81% would mandate using local data with the need for assessing the transferability of international evidence, while the remaining 14% prefer mandating the use of local data, but they do not require assessing the transferability of international evidence.

Based on the responses there was lack of local registries and limited accessibility to payers’ databases (71%). Most respondents preferred having both up-to-date registries and payers’ databases in the future (81%).

International collaboration

Most respondents preferred a kind of international collaboration, either by being involved in joint work initiatives (25%) or by adapting joint HTA documents (35%) or by the appropriate reuse of HTA materials prepared by international HTA bodies (90%). 86% of the participants had a high interest in developing and participating in international HTA courses.

2. Round Table discussion

Decision-makers involved in the discussion were affiliated to the Ministry of Health, and Sultan Qaboos Oncology Hospital and other institutions. The round table discussion resulted in a detailed HTA implementation roadmap broken down into three distinct phases, short-term (1-2 years), mid-term (3-5 years), and long-term (6-10 years) as shown in Table 1.

Table 1: Roadmap for HTA implementation in Oman

Element	1-2 Years	3-5 Years	6-10 Years
Capacity building	Train the trainers (Masters/Ph.D. abroad), regular short courses for decision-makers	HTA public awareness	Decide on local academic programs implementation
Funding	Appraisal: MoH + minor submission fees. Assessment: manufacturer	Outsourcing appraisals if capacity of appraisals increased	Assessment of projects (not of interest to manufacturers) by the MOH e.g. awareness campaigns
Legislation	Single national HTA unit under the umbrella of the MoH	Unit will expand with increasing scope of technologies	
Scope	Innovative pharmaceuticals with high budget impact	Expand scope to medical devices and surgical interventions	Expand scope to prevention programs and revising HTA decisions
Decision criteria	Use WHO threshold (1-3), multiple thresholds, and pilot MCDA in certain cases	Develop a CET for Oman, expand the use of MCDA	
Quality & transparency	Recommendations only are published during the first 5 years	After 1 year of pilot testing, clear timelines will be established	Critical appraisal reports are published
Use of local data	Use available local data from electronic databases	Build local data warehouse designed to support HTA	
International collaboration	Participation/hosting international training	Exchanging experience through gulf cooperation council	

Regarding capacity building, regular short courses and HTA awareness programs were recommended. The Ministry of Health will primarily fund the critical appraisal, supplemented by minor submission fees from manufacturers while the assessment will be predominantly conducted by the manufacturer. In terms of organizational structure, a single HTA unit will be established under the umbrella of the Ministry of Health. The scope of pharmaceuticals will be expanded to include non-pharmaceuticals and revising old reimbursement decisions. For multi-source drugs, a multi-criteria approach will be used. Additionally, a cost-effectiveness threshold specific to Oman will be developed. This holistic approach aims to ensure the effective and efficient implementation of HTA in Oman.

CONCLUSIONS

While there are some challenges currently facing the implementation of HTA in Oman, it’s encouraging to see that initiatives are underway, and steps are being taken. This demonstrates the shared belief and will among various stakeholders in HTA’s potential to enhance Oman’s healthcare system. Our roadmap, which is the result of a multi-stakeholder dialogue, outlines long-term objectives for HTA implementation.

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