LEARNING MODULE FOR PATIENTS AND THE PUBLIC:

# ACCE agency for care effectiveness

### How is health technology assessment (HTA) done?

#### QUICK RECAP

Health technology assessment (HTA) is a **systematic** method which gathers and reviews information from a **range** of sources to understand the **benefits**, **risks**, and **costs** of health technologies compared to other options that are available.



### What types of information are used as HTA evidence?

There are **various** types of information considered as evidence in an HTA, including effectiveness and safety data from clinical trials, input from doctors, and lived experiences of patients and their carers. Sometimes, information about social or cultural factors relevant to the HTA topic is also collated.

All this information is used to help decision-makers understand the **local context** and answer important questions they may have about a new health technology to determine its **value**.

Safety

What is the safety profile (side effects

and adverse events) of the health

technology compared to other treatments?

#### Affordability

How much will it **cost** the government to fund the health technology for all patients who need it each year? How much will patients have to pay?

#### Clinical effectiveness

How well does the health technology **work** in real-world conditions compared to other treatments?

#### Equity

Are **certain groups** of patients affected more than others? Epidemiology Who is affected and how?

### Cost effectiveness

Does the cost of the health technology **justify** its benefits compared to other treatments?

#### Service use

What is the **expected level of use** if the health technology is funded?



#### Quality of life

Does the health technology **improve** patients' quality of life?

#### DIFFERENT SOURCES OF LOCAL AND INTERNATIONAL INFORMATION INCLUDE:

- Clinical trial reports
- Scientific literature such as journal articles
- Disease registries



Expert opinions from local doctors and patients



Information from health technology companies, including proposed prices of health technologies, clinical and economic evidence.

### What steps are involved in an HTA?

Each country has different HTA processes. In Singapore, these steps are usually followed for each HTA: Develop an economic model to compare the **START** costs and benefits of new and existing health technologies (if required) Identify and prioritise topics that are suitable for HTA Collate the evidence into an HTA report Determine which **questions** the HTA will answer **Present** the HTA report to decision makers to inform their funding recommendations Collect all available relevant evidence including input from doctors and patients **Publish funding** recommendations and GUIDANCE the key evidence that informed the recommendations Generate new evidence (if there are evidence gaps) Implement funding decisions and monitor impact Appraise (interpret) the quality of the evidence END to check if it is reliable and useful

At the Agency for Care Effectiveness (ACE), HTAs typically take 3 to 6 months to complete depending on **how complex** the topic is and **how much information** needs to be reviewed. Some evaluations can take longer, especially if an economic model is required or price negotiations with a company are prolonged. (Negotiations with companies are conducted to ensure the prices of health technologies are fair and represent good value.) Funding for recommended health technologies typically occurs within 4 to 6 months after a recommendation has been made by the decision makers.



#### 1. What is true about the HTA process?

- A. Each country has different HTA processes
- B. All available clinical and economic information that is relevant to the HTA is collected from different local and international sources
- C. All of the above

## 2. Which statement about the information used in HTAs is not correct?

- A. Only information about clinical effectiveness and cost effectiveness is used
- B. Relevant information about social and cultural factors may be considered
- C. Input from local doctors and patients is included

Note down your answers and click here to see the correct answers on the next page.



#### 1. What is true about the HTA process?

- A. Each country has different HTA processes
- B. All available clinical and economic information that is relevant to the HTA is collected from different local and international sources
- C. All of the above

While HTA processes may differ across countries, they generally follow similar steps when gathering the best available evidence, checking the information for quality and relevance, and assessing the health technology's benefits, harms and costs compared to alternative options. HTAs are then used to inform funding recommendations and the appropriate use of the health technology in the local context.

- 2. Which statement about the information used in HTAs is not correct?
- A. Only information about clinical effectiveness and cost effectiveness is used

B. Relevant information about social and cultural factors may be considered

C. Input from local doctors and patients is included

While the clinical effectiveness and cost effectiveness of a health technology is crucial information, HTAs typically require other information as well, including the impact on patients' quality of life, affordability, social and cultural factors, as well as input from local doctors, patients and their carers. This ensures a more comprehensive assessment of the value of health technologies.



**Learning Modules** are developed by the Consumer Engagement and Education (CEE) team at ACE. For more information about other educational resources or opportunities to get involved in ACE's work, please refer to our webpage or contact us at ace\_cee@moh.gov.sg.

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