# The Changing Landscape of Health Technology Assessment (HTA) in the Asia-Pacific (APAC) Region: Advances, Challenges and Future Goals

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## Background and Objective

- Over the years, HTA agencies have grown rapidly, worldwide owing to the substantial increase in the healthcare costs[1]
- A similar trend has been observed in the APAC region, where HTAs have expanded significantly since the 1990s, with continuous efforts to improve the accessibility and affordability of care[1]
- This study aims to examine the evolution and implementation of HTAs in the key APAC markets (South Korea, Japan, Singapore, Taiwan (Republic of China), and China)

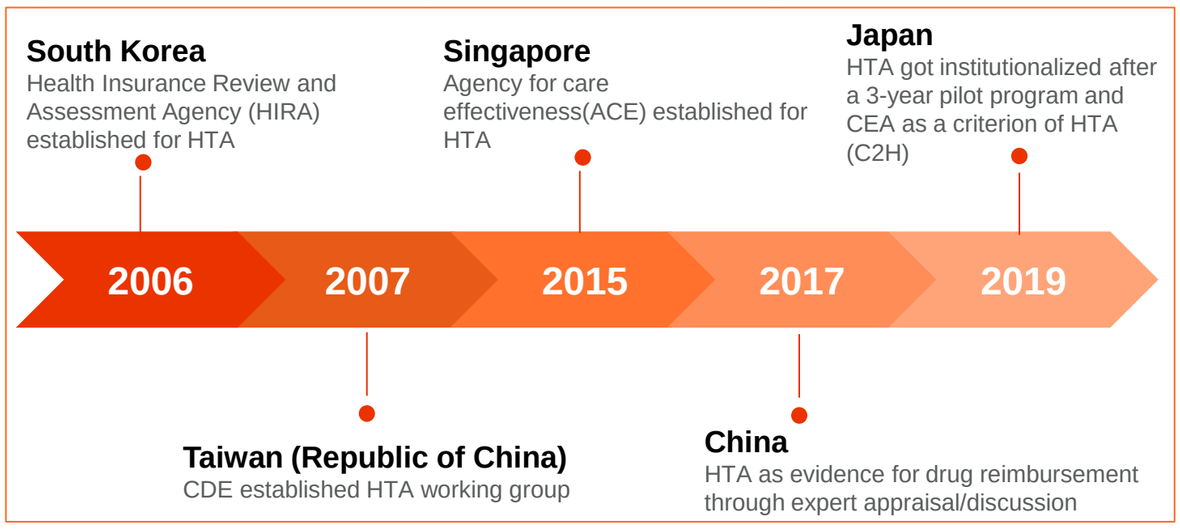
## Methods

- A comprehensive literature search was conducted to understand HTA structures and practices across selected APAC countries
- This search included an in-depth analysis of HTA methodologies, criteria, and decision-making processes specific to each country
- Further, it was supplemented by secondary research of published studies on HTA implementation and regulation, providing a broad understanding of the HTA landscape in the APAC region

## Results

- South Korea and Taiwan (Republic of China) were one of the first regions to have a formal HTA process, followed by Singapore[1] **(Figure 1)**

**Figure 1: HTA establishment year across the APAC region**




- Most regions emphasize cost-effectiveness (CE), budget impact (BI), clinical effectiveness, and quality of life (QoL), as the key evaluation criteria for the new drug/ technologies[2,7,8,14] **(Table 1)**
- Apart from Singapore HTA (ACE), societal values, such as disease severity, rarity, and urgency, were not a primary focus for technological assessments[3,4,6,12,13]
- The HTA framework for China and Taiwan has evolved over the years incorporating CE and clinical outcomes and has increasingly included stakeholder input, such as HCP and patient opinions, in the recent years[3,4]
- Similarly, Japan also incorporates CE & clinical outcomes for technology assessments however, it does not consider HCPs or patient opinions for decision making[13]

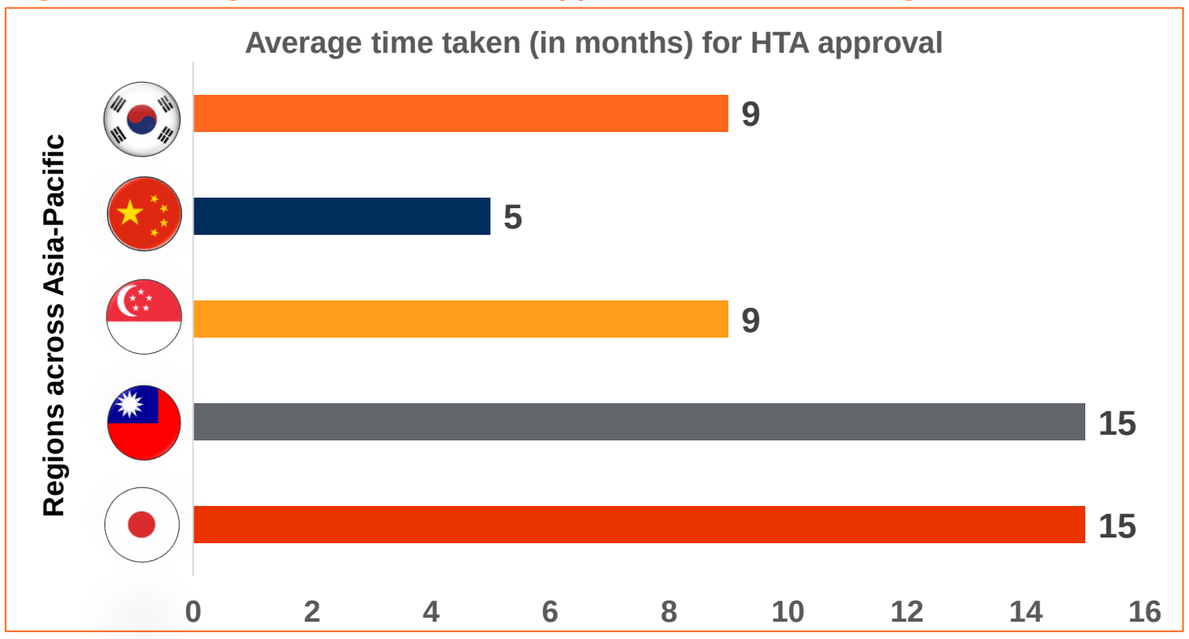
**Table 1: Parameters necessary for HTA evaluation criteria**

| Evaluation criteria | China | South Korea | Japan | Singapore | Taiwan (Republic of China) |
|---|---|---|---|---|---|
| Clinical outcomes (Efficacy/ Safety) | ● | ● | ● | ● | ● |
| HCPs and Patient opinion | ● | ● | ● | ● | ● |
| Favorable cost-effectiveness | ● | ● | ● | ● | ● |
| Focus on societal values | ● | ● | ● | ● | ● |
| Positive healthcare budget impact | ● | ● | ● | ● | ● |
| Emphasis on Quality of life | ● | ● | ● | ● | ● |

● Strongly preferred ● Moderately preferred ● Least preferred

**Note: Color of the icon indicates the preference of the criteria considered by HTA agency for technology evaluation**

**Figure 2: Average time taken for HTA approval across APAC region**




- The average time for an HTA approval across the APAC regions varies from 5 months in China to 15 months in Japan and Taiwan[5,13] **(Figure 2)**
- One of the foremost challenges that HTA bodies in the APAC region face is balancing the cost-effectiveness with broader societal values, integrating real-world and local data, and ensuring consistent stakeholder engagement[3,4,7,12,13] **(Figure 3)**

**Figure 3: Challenges in HTA implementation across APAC region**

| | |
|---|---|
| **China** | • Absence of comprehensive guidelines on evidence submission and quality review processes<br>• Limited use of real-world data in HTA assessments<br>• Lack of transparency in the decision-making process |
| **South Korea** | • Stricter ICER thresholds pose challenges for reimbursing innovative therapies especially orphan and oncology medicines |
| **Japan** | • C2H mainly use inputs from cost-utility analysis and lack input from HCPs and patient<br>• ICER threshold is not clearly defined, and it is not mandated by the Japan HTA |
| **Singapore** | • Need for specific HTA methodologies to assess advanced medical technologies, such as immunotherapies and gene therapies<br>• Lack of local HTA capabilities and technical expertise |
| **Taiwan (Republic of China)** | • Conflict of interests among stakeholders including industry representatives<br>• Importance of considering long-term value and broader societal perspective on health technology is underscored |

## Conclusion

- In conclusion, strengthening stakeholder engagement in the HTA process is essential for improving access and affordability of innovative therapies
- By collaborating with experts, raising awareness, expanding research, and aligning HTA capabilities locally, HTA implementation can be streamlined
- Future goals should focus on integrating real-world evidence for data-driven decisions, promoting transparency to build trust, and embedding societal values into assessments to reinforce the HTA framework across the APAC region

## References

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