

Optimising Topic Prioritisation for HTA in Medical Technologies in Singapore

The Development, Validation and Feasibility of Process Enhancements

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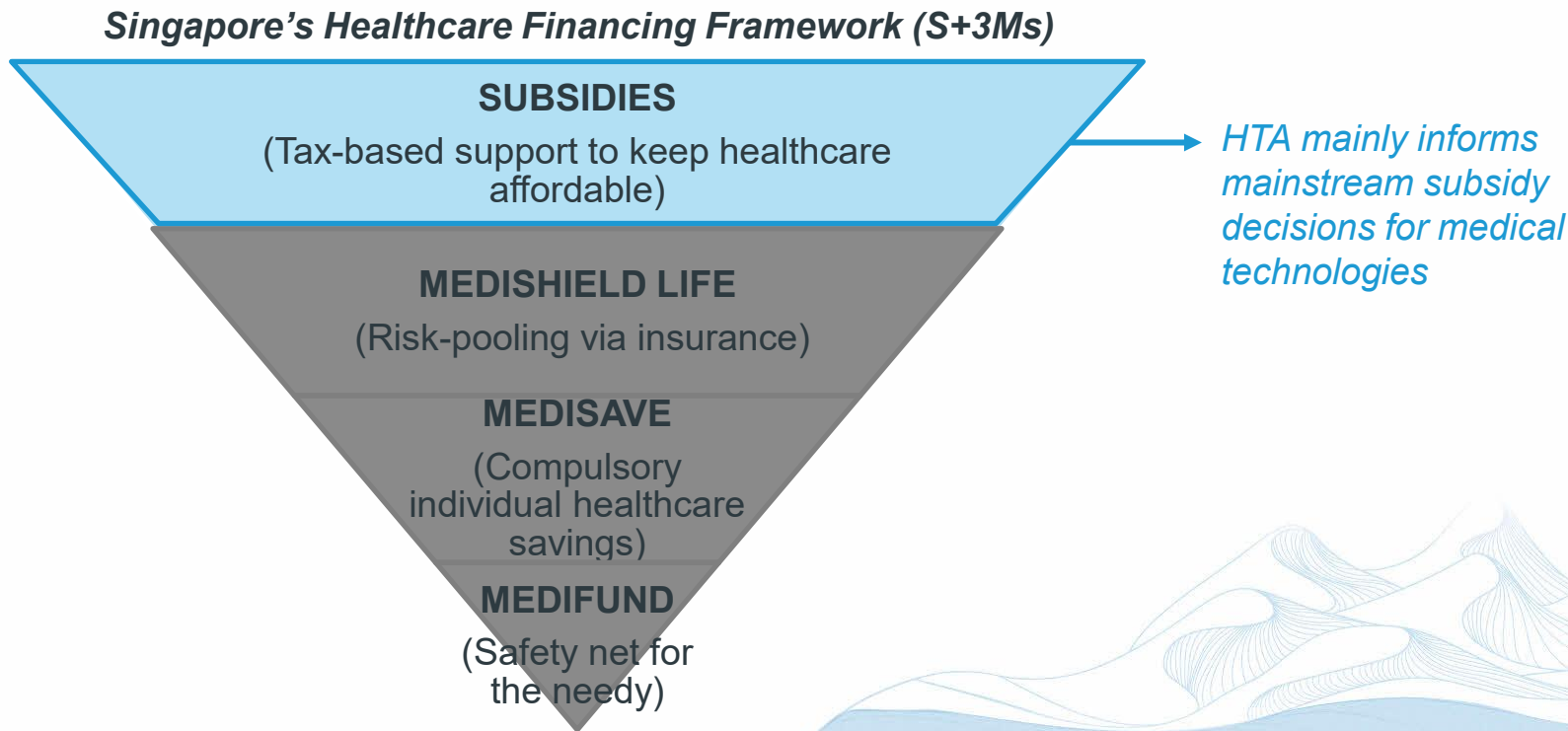
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POLICY CONTEXT



In Singapore, HTA helps direct mainstream subsidies towards clinically and cost-effective medical technologies

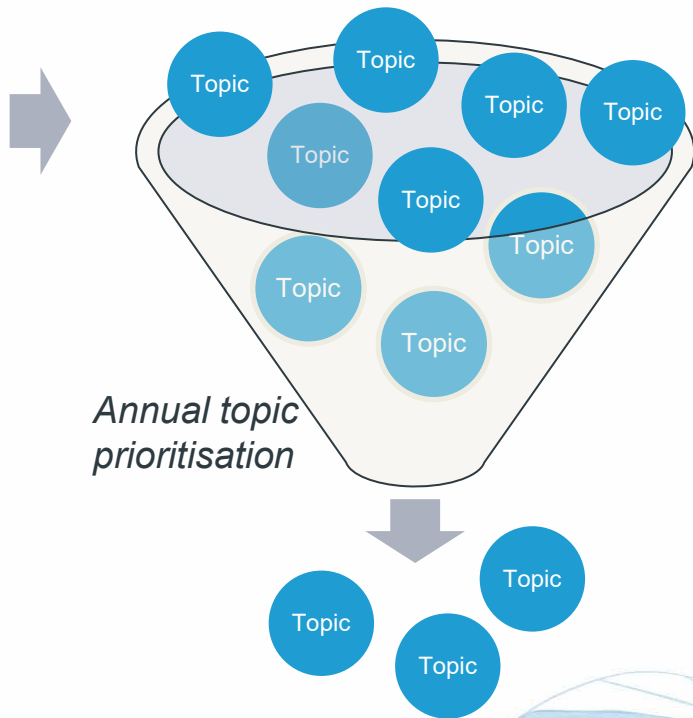


RATIONALE



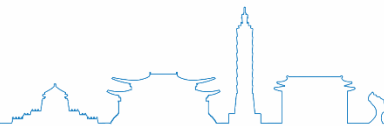
Given highly diverse landscape, ACE conducts annual topic prioritisation exercise so scarce evaluation resources are directed to topics where evaluation can meaningfully affect affordability and funding decisions.

Many potential topics from various channels: clinicians, patients, horizon scanning, etc.



Higher-impact HTAs: Selected topics that are timely, feasible and likely to inform mainstream subsidy decisions.

OBJECTIVE



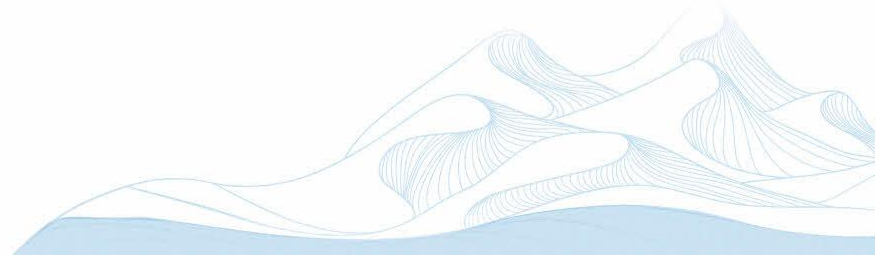
ACE sought to strengthen topic prioritisation through early consideration of additional domains



Study aim: To develop, retrospectively validate and assess the feasibility of process enhancements for the 2025 medical technology topic prioritisation exercise.



Overall goal: To identify low-yield topics less suitable for HTA earlier, so that evaluation resources could be directed towards higher-impact topics.



METHODS



The methodology combined development, retrospective validation and feasibility assessment

1

Development of process enhancements through thematic analysis

- Identified common challenges that caused late-stage topic attrition

2

Retrospective analysis against past topics

- Analysis of 19 topics from previous topic submissions that did not progress to completion (2016-2024) and deferred topics (2021-2026).
- % success of enhanced process = $\frac{\text{No. of derailed topics that could be identified earlier}}{\text{Total number of previously derailed topics}}$

3

Feasibility Assessment

- Assessed whether the enhanced assessments improved overall efficiency
 - Evaluated barriers to conducting these assessments
- 

RESULTS



1

Thematic analysis: 3 new domains were identified

Existing screening already considered eligibility and literature. The enhanced process added policy considerations, financial gaps and subsidy implementation barriers.

Policy consideration

Seek inputs from policy-makers to ensure alignment with relevant policies



Financial gap

Ascertain existing financing of medical technologies across public healthcare institutions



Subsidy implementation

Identify potential implementation barriers

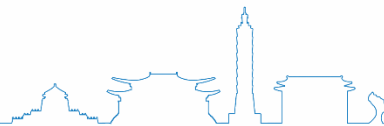


Shifting the process from “Can we evaluate this?” to

“Would HTA meaningfully affect affordability and funding decisions, and can subsidy be implemented?”



RESULTS



2

Validation against past topics: 79% of historically derailed topics could potentially have been filtered earlier

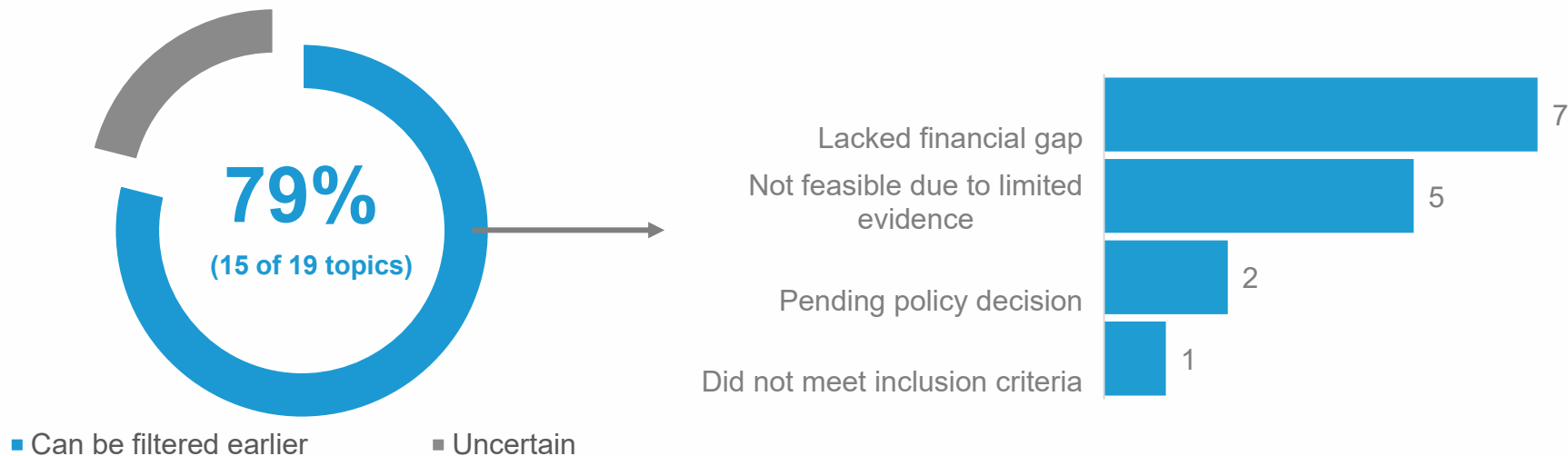


Figure 1. Retrospective validation of enhanced process against past topics

The greatest gain came from clarifying whether there was a real policy, evidence or financing barrier before HTA work began.

RESULTS



2

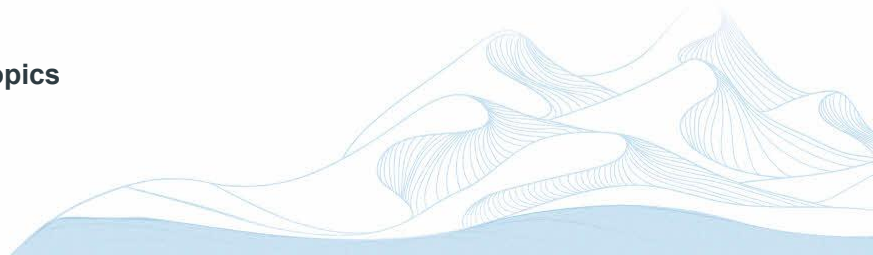
Validation against past topics: For remaining 4 topics, while implementation challenges may be difficult to anticipate, early assessments remains valuable in mitigating potential barriers



■ Can be filtered earlier ■ Uncertain

- Early domain assessments can reduce avoidable late-stage attrition by identifying policy, financing and implementation issues before HTA evaluation.
- However, it cannot eliminate all uncertainty. Some implementation challenges only emerged after deeper engagement, new evidence or policy developments during HTA evaluation.

Figure 2. Retrospective validation of enhanced process against past topics



RESULTS



3

Feasibility assessment: Front-loading enhanced screening requires additional time, but remains feasible if it helps ensure only high-impact topics proceed and unsuitable topics are stopped or deferred earlier.

~2-3 months

Time required for early domain assessment across topics

~3-12 months

Time required for technical evaluation of one topic

Completeness and timely awareness of inputs from policy owners, financing teams, clinicians and public healthcare institutions are essential for the new domains to work.

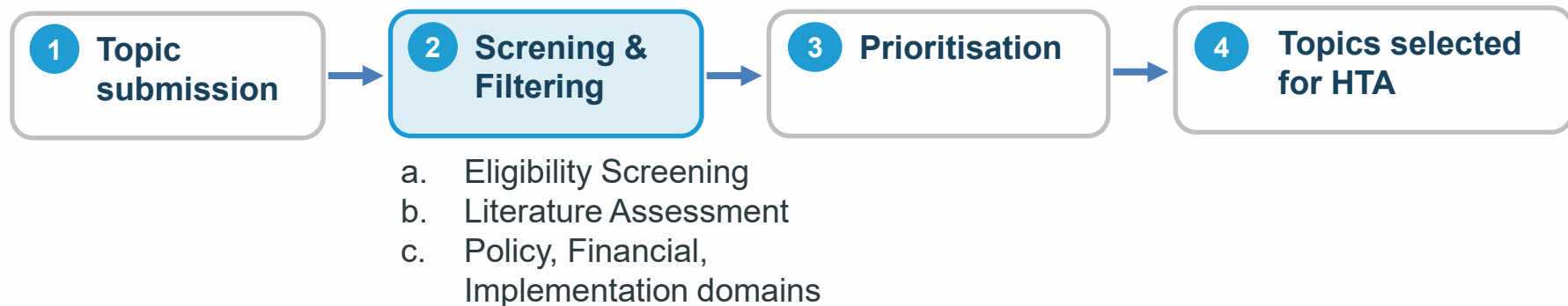
The enhanced process is worthwhile if it avoids low-impact full evaluations while improving the policy relevance of selected topics.

RESULTS



3

Feasibility assessment: The enhanced process creates earlier "stop, pause or proceed" decisions



Earlier decision logic

STOP: No clear policy/ financial gap or does not meet inclusion criteria

PAUSE: Await policy decision, evidence maturity or implementation readiness

PROCEED: Timely, feasible and likely to inform mainstream funding decision

CONCLUSION & FUTURE DIRECTIONS

Early consideration of additional domains and close stakeholder relations can help HTA agencies choose better topics sooner



Adding policy , financial and implementation domains strengthen topic prioritisation by supporting more timely and policy-relevant decision-making



Effective stakeholder engagement and timely inputs remain essential for identifying higher impact topics for HTA evaluation and subsidy consideration



ACE will continue to refine these considerations through future prioritisation exercises as the medical technology landscape evolves

THANK YOU



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