A New Process For Patients And Caregivers To Suggest Health Technologies For Funding Consideration In Singapore

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Introduction

- In Singapore, health technologies were previously identified for funding consideration through horizon scanning or applications from clinicians at public healthcare institutions, before being prioritized by Ministry of Health (MOH) advisory committees for evaluation by the Agency for Care Effectiveness (ACE).

- In 2023, a new process was co-developed with local patient organizations to enable patients and caregivers to also suggest health technologies (drugs or medical devices) for evaluation. This process, known as the *annual call for topics*, marks a significant shift towards including and valuing patient and caregiver perspectives when determining which health technologies should be considered for funding to improve patient care and meet the needs of the population.

Methods

- **Designing an application form:** In July 2023, ACE's Consumer Engagement and Education (CEE) team developed a patient-friendly application form in plain language, which required applicants to include the name of the health technology and formulation, the medical condition it is used for, perceived benefits and disadvantages, and reasons why it should be funded. A factsheet[2] explaining the application process was also co-developed with local patient organizations and published on ACE's website (Fig. 1).
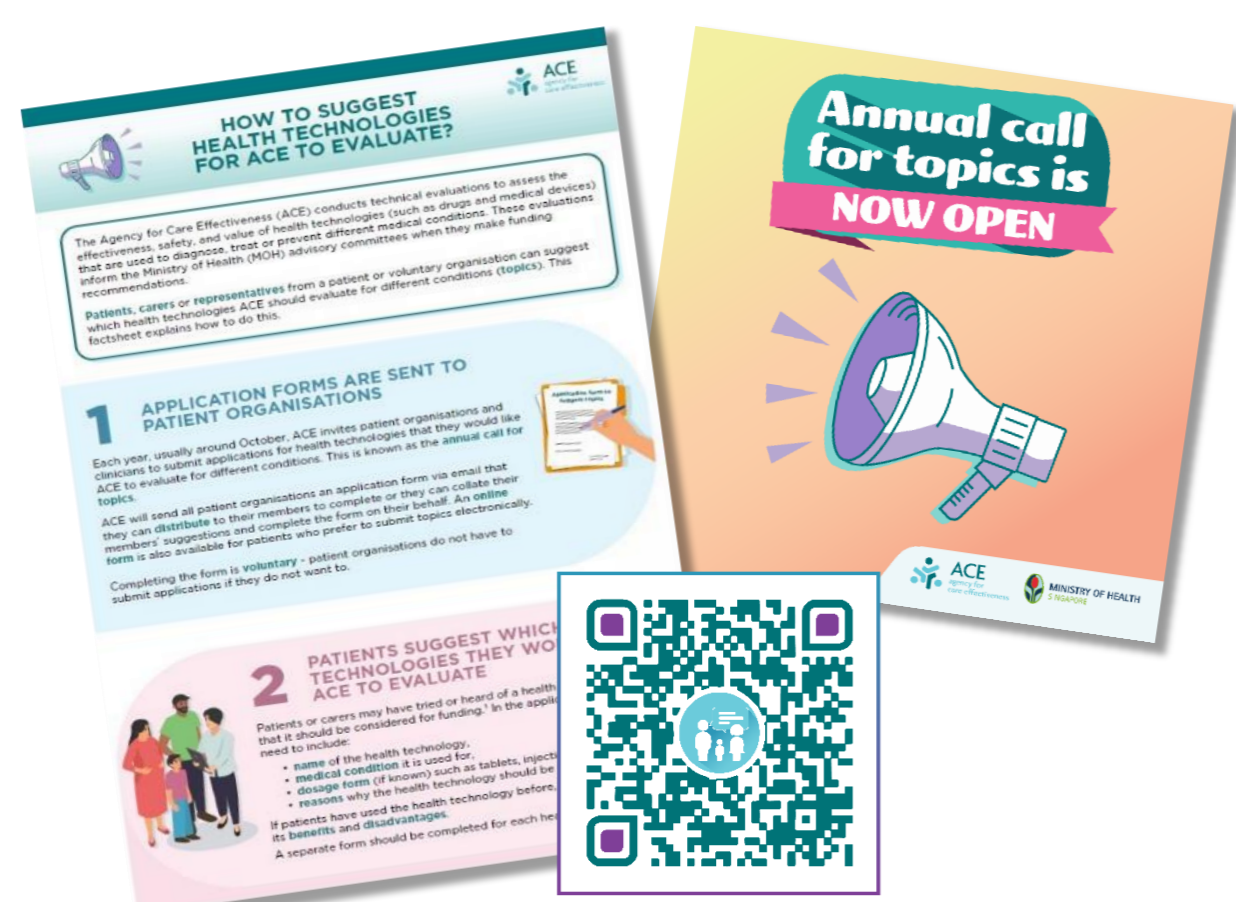

Figure 1: Annual call for topics Facebook post and factsheet on "How to suggest health technologies for ACE to evaluate?"

- **Raising awareness of the new process:** In the lead up to the application period, the new process was publicized in ACE's quarterly patient newsletter (*CEE Updates*) and any process queries from patient organizations were addressed. This helped to raise awareness of the process among patients and caregivers.

- **Application period and outreach:** In October 2023, the application form and supporting factsheet were electronically distributed to all local patient organizations. Applications were accepted until January 2024 and email reminders were sent to patient organizations until applications closed. During the application period, strategic messages were published on ACE's social media platforms to amplify outreach efforts (Fig. 1).

The following health technologies are outside of ACE's remit for evaluation:
- Health technologies not approved by Singapore's regulatory authority (Health Sciences Authority)
- Dental technologies
- Dialysis solutions
- Fertility technologies
- Health products that can be purchased without a prescription
- Homeopathic medicines
- Lifestyle drugs
- Proton beam therapy
- Traditional Chinese medicines
- Vital sign monitoring devices
- Wound dressings

Additional exclusion criteria:
The health technology:
- is already within ACE's workplan, or
- has already been subsidized for the requested indication, or
- has been evaluated by ACE within the last 2 years

Figure 2: Exclusion criteria to filter out topics that are not suitable for evaluation by ACE

- **Prioritization by MOH advisory committees:** ACE filtered the suggested topics against elimination criteria (Fig. 2) after the application period closed. Need scores were assigned to each remaining topic based on specific selection criteria (Fig. 3). Each topic was then presented to the MOH advisory committees who prioritized which ones should be added to ACE's future work plan for evaluation. Applicants were notified by CEE whether the topics they suggested were prioritized for evaluation.
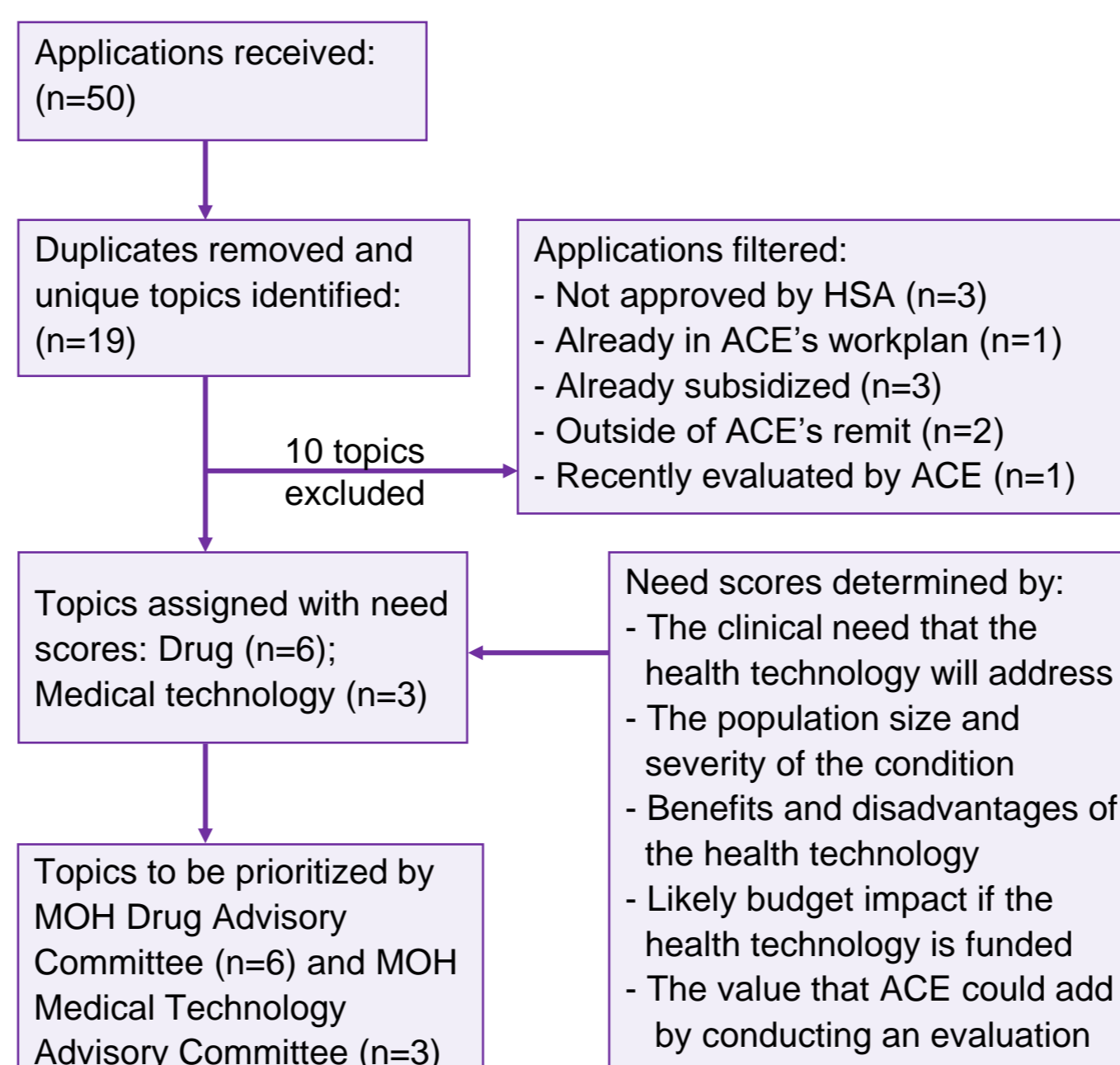

Applications received: (n=50)

Duplicates removed and unique topics identified: (n=19)

Applications filtered:
- Not approved by HSA (n=3)
- Already in ACE's workplan (n=1)
- Already subsidized (n=3)
- Outside of ACE's remit (n=2)
- Recently evaluated by ACE (n=1)

10 topics excluded

Topics assigned with need scores: Drug (n=6); Medical technology (n=3)

Need scores determined by:
- The clinical need that the health technology will address
- The population size and severity of the condition
- Benefits and disadvantages of the health technology
- Likely budget impact if the health technology is funded
- The value that ACE could add by conducting an evaluation

Topics to be prioritized by MOH Drug Advisory Committee (n=6) and MOH Medical Technology Advisory Committee (n=3)

Figure 3: Flowchart of topics suggested by patients and carers

Results

- 50 applications covering different conditions (Fig. 4) were received from patients compared to 75 from clinicians. Most patient applications were for drugs for respiratory conditions (66%) or skin conditions (6%). Duplicate topics were removed resulting in 19 unique topics from patients and 53 from clinicians. Only 5 patient topics overlapped with topics suggested by clinicians.

- 10 patient topics were excluded after applying the filtration criteria (Fig. 3). Six drug topics and three medical technology topics had need scores assigned and were presented to the MOH advisory committees for prioritization.

- Most patient applicants suggested health technologies that they had used before and felt were effective and convenient, but unaffordable without government funding.

Discussion

- Minimal overlap between topics suggested by patients and clinicians highlights that patients and caregivers in Singapore may perceive clinical need differently from clinicians.

- Patient applications tended to include personal experiences describing the condition, its impact on their daily lives and the disadvantages of available treatments, while clinicians were more likely to provide clinical data to support their applications.

- The inclusion of patients and caregivers in the topic prioritization process provided valuable alternative perspectives that helped identify health technologies which could address unmet clinical needs.

Medical technologies (12%) for managing:
- Blood and immune system conditions
- Cancer
- Diabetes and other endocrinal, nutritional and metabolic conditions
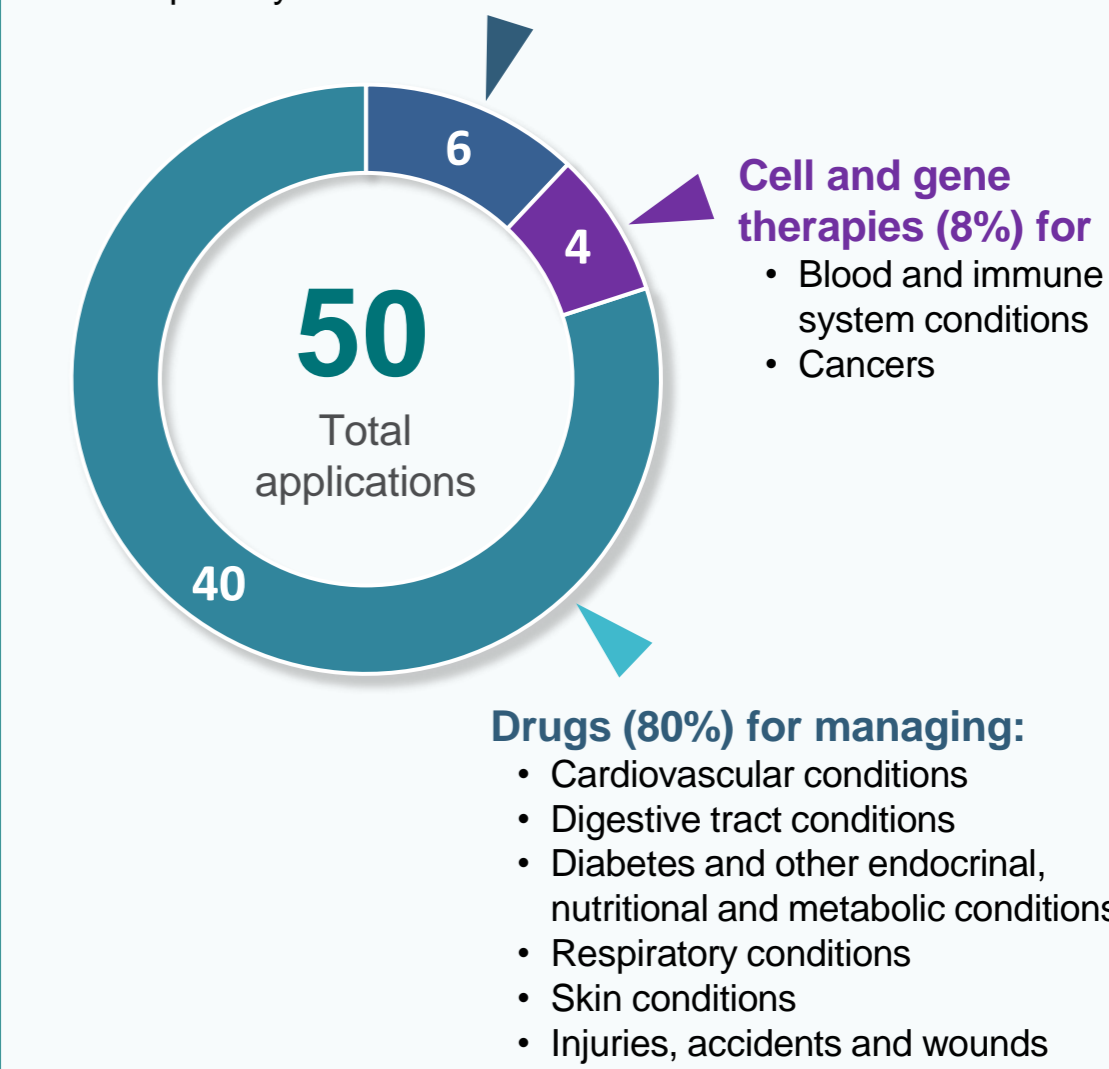- Respiratory conditions

Cell and gene therapies (8%) for
- Blood and immune system conditions
- Cancers

50 Total applications

6
4
40

Drugs (80%) for managing:
- Cardiovascular conditions
- Digestive tract conditions
- Diabetes and other endocrinal, nutritional and metabolic conditions
- Respiratory conditions
- Skin conditions
- Injuries, accidents and wounds

Figure 4: Conditions covered in patients' applications

Conclusion

- The call for topics process will be updated in line with feedback to encourage continued patient participation annually.

- Enabling patients and caregivers to suggest health technologies for evaluation provides ACE with a better understanding of their needs, preferences, lived experiences and expectations.

- This ensures that subsequent funding recommendations, informed by ACE's evaluations, address therapeutic gaps, and improve treatment affordability and patient outcomes.

References:
1. Agency for Care Effectiveness, Ministry of Health Singapore. April 2024. Process and methods guide for patient involvement (Version 1.2).
2. Agency for Care Effectiveness, Ministry of Health Singapore. April 2024. How to suggest health technologies for ACE to evaluate?