

Scanning The Right Horizons: Does Singapore's Horizon Scanning Identify And Assess The Relevant Technologies?

¹Jaryl NG, ¹Hong JU, ¹Zhen Long NG, ¹Swee Sung SOON, ¹Kwong NG

¹Agency for Care Effectiveness (ACE), Ministry of Health, Singapore

Introduction

The Agency for Care Effectiveness (ACE) in Singapore has established a horizon scanning (HS) system to:

- Provide advanced notice of new and emerging medical technologies (MedTechs) for early service planning;
- Safeguard against the use of low-value MedTechs; and
- Identify potential HTA topics for subsidy consideration.

This study aims to determine the relevance of the MedTechs identified and assessed by ACE.

Methods

- MedTechs identified by ACE between 2020 and 2023 were analysed to examine the distribution in terms of MedTech fields.
- Medtechs assessed during the same period were compared with the top ten health technology trend identified by the Canadian Agency for Drugs and Technologies in Health (CADTH) in 2022.
- Feedback from key stakeholders such as clinicians and policymakers on the HS reports was summarised.

Results

- From 2020 to 2023, 1,703 MedTechs were identified from various databases and manufacturer submissions, among which 20 underwent an in-depth HS assessment.
- In line with the international trend, digital health technologies (DHTs) have grown and become the largest proportion of a single category of technologies identified in 2023 (Figure 1).

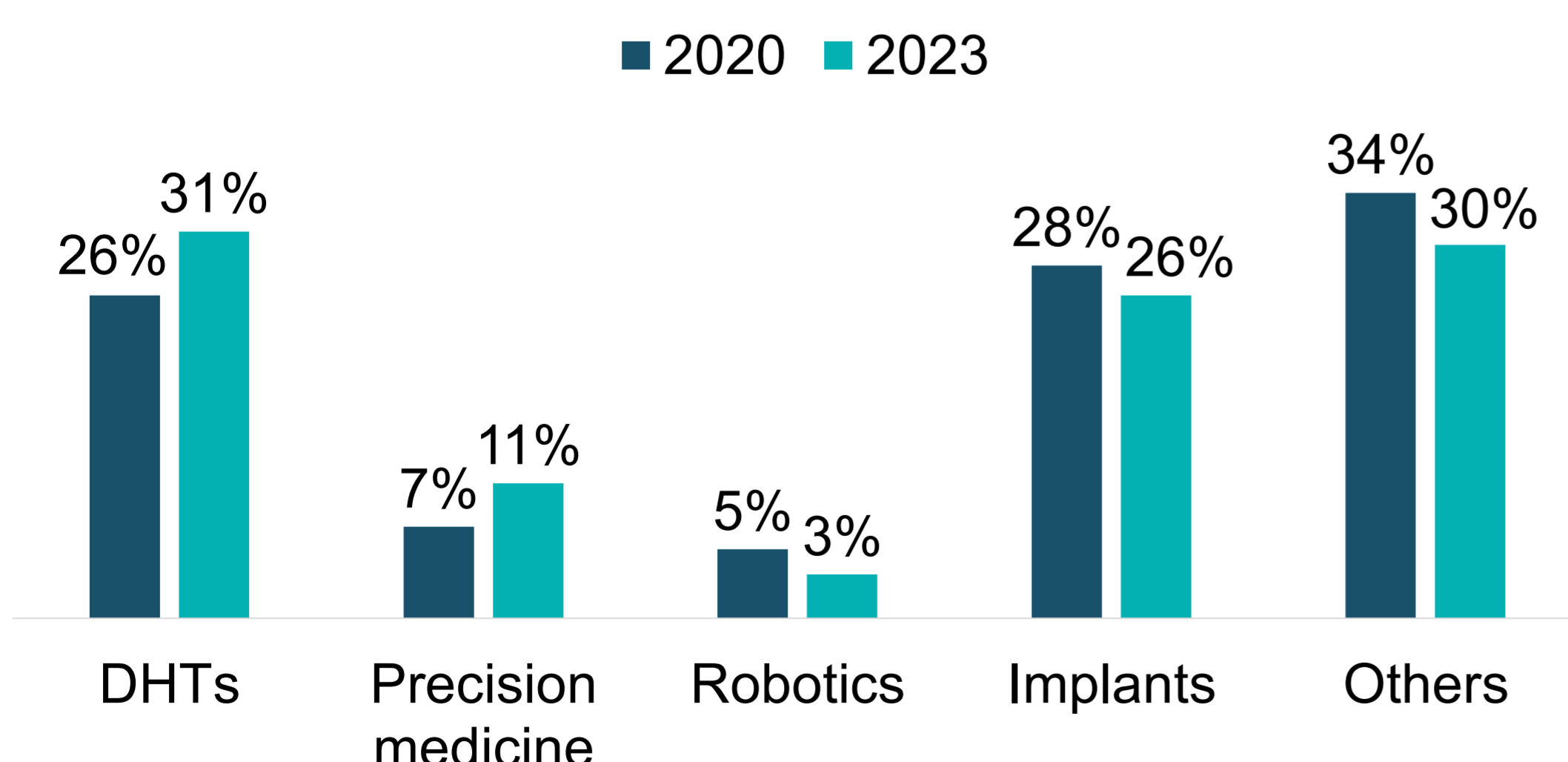


Figure 1: Distribution of identified MedTechs by major technological trends between 2020 and 2023.

- 70% of the 20 Medtechs assessed via HS belonged to the top trending MedTech fields identified by CADTH (Figure 2).

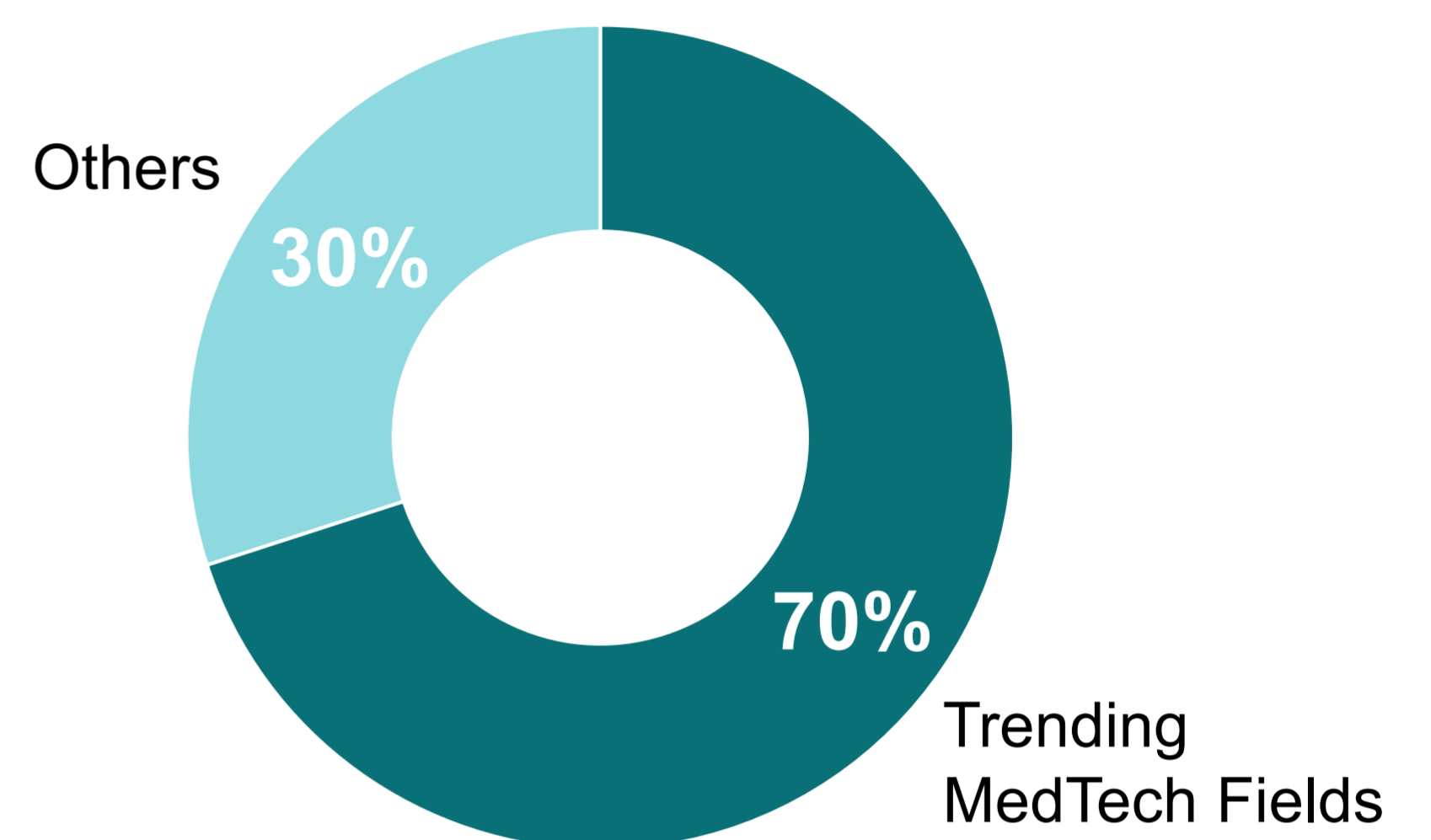


Figure 2: Proportion of evaluated MedTechs that belonged to trending MedTech fields identified by CADTH.

- Majority of the assessed technologies within the trending MedTech fields were artificial intelligence for diagnostics and point-of-care testing (Table 1).

Table 1: Distribution of evaluated MedTechs in trending MedTech fields.

MedTech Field of Evaluated Technology	N (%)
Artificial intelligence for diagnostics	5 (36%)
Point-of-care testing	4 (29%)
Companion diagnostics	2 (14%)
Wearables	2 (14%)
Remote monitoring	1 (7%)

- Initial stakeholder feedback was positive, citing HS reports to be relevant for clinical practice and been referenced to support regulatory decisions by policy makers

Conclusion

- In line with global MedTech trends, ACE's HS system identified and assessed similar categories of MedTechs, with the greatest growth observed for DHTs.
- Supportive feedback from local key stakeholders indicated the relevance and value of ACE's HS work.