

Increasing Emergence of Novel Digital Health Technologies Identified Through Horizon Scanning

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Introduction

- Digital health technologies (DHTs) are novel medical technologies (MedTechs) that pose a challenge to conventional HTA methods, mainly due to the lack of a robust evidence base and technology-specific considerations such as software updates.
- Various initiatives to develop new HTA methods are underway, such as the evidence standards framework for DHTs developed by the National Institute for Health and Care Excellence (NICE).

Objectives

- This study aims to investigate the pattern of DHTs identified by the Agency for Care Effectiveness (ACE)'s horizon scanning (HS) system and the potential implications on subsequent HTA methodology.

Methods

- Using ACE's past topic prioritisation exercises for HS, the filtered MedTechs were further classified as DHTs and non-DHTs to examine the pattern of DHTs identified (Figure 1).

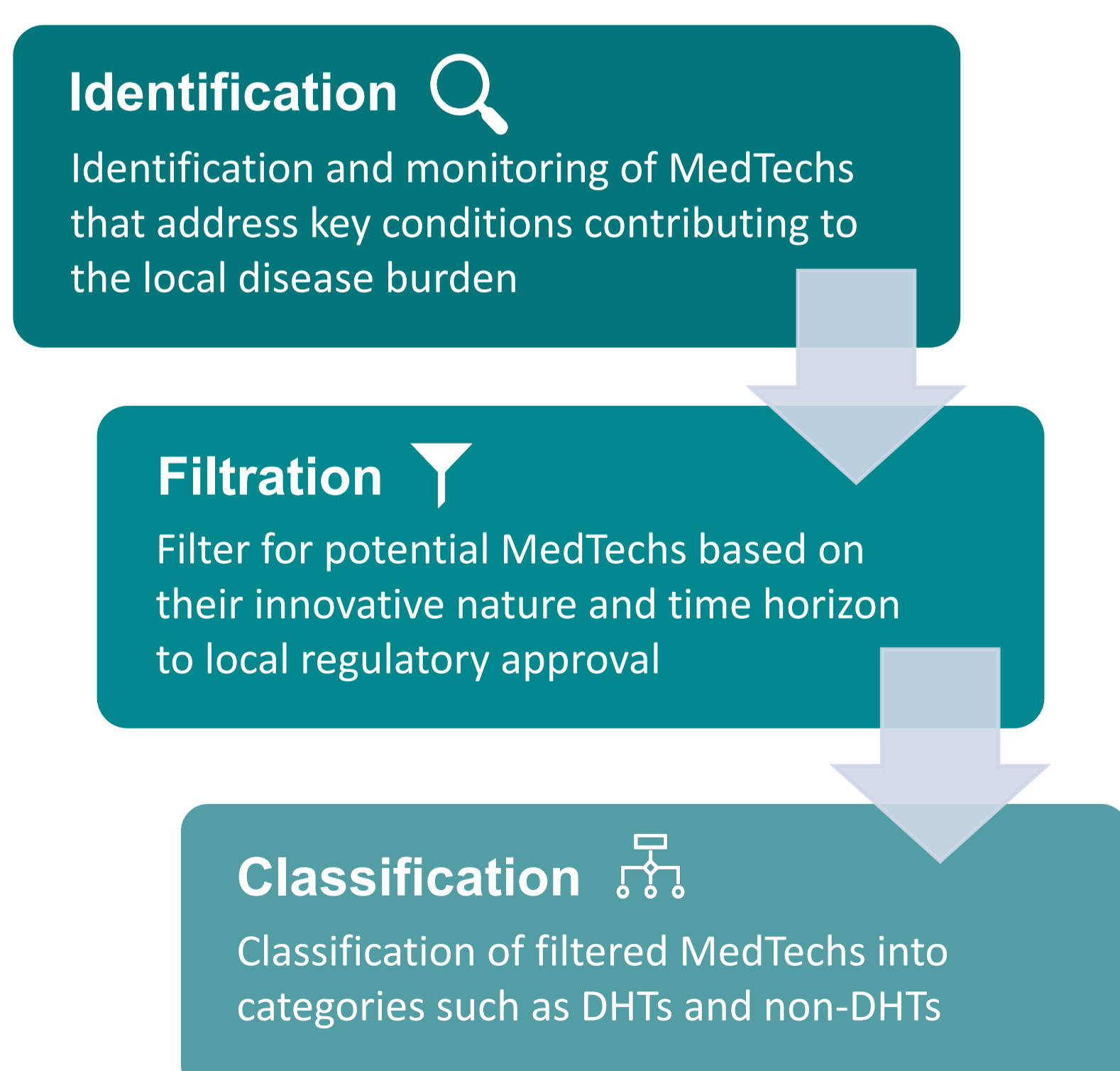


Figure 1: Process flowchart depicting topic identification, filtration and classification of MedTechs

Results

- Across the two topic prioritisation exercises in 2021 and 2022, the proportion of DHTs among the filtered MedTechs increased by around two-fold year-on-year (Table 1 and Figure 2).
- These DHTs included medical device software and digital therapeutics.

Table 1: Proportion of filtered MedTechs and their classification

	2021	2022
Total MedTechs identified	807	1231
↳ Filtered	35	42
↳ DHTs	6	15
↳ Non-DHTs	29	27

Abbreviations: DHT, digital health technology; MedTechs, medical technologies.

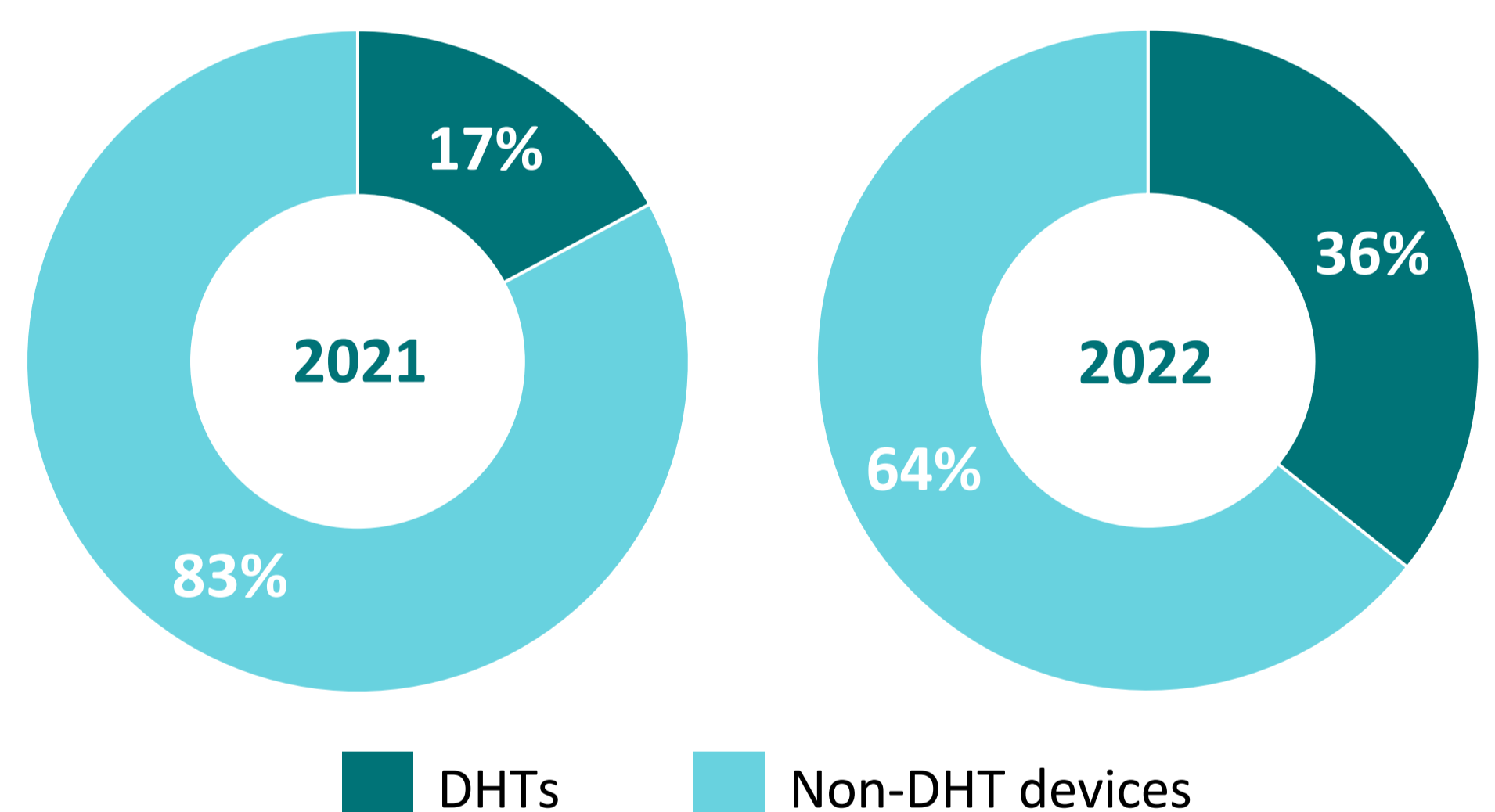


Figure 2: Proportion of digital health technologies (DHTs) among the filtered MedTechs identified in 2021 and 2022

Conclusion

- Given the substantial increase in DHTs that are anticipated to enter the local healthcare system soon, this may call for current HTA methods to be modified to enable meaningful evaluation of DHTs.

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