

What's Trending? An Inaugural Multi-Stakeholder Effort to Identify Top Emerging Medical Technology Trends in Singapore's Healthcare System

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Introduction

The Agency for Care Effectiveness (ACE)'s Horizon Scanning (HS) system identifies and assesses new and emerging medical technologies (MedTech) to facilitate early organisational preparedness. Recognising the potential to expand beyond individual MedTech assessment, ACE collaborated with stakeholders to examine the emerging MedTech trend and develop an Innovation Trend Report (ITR). This report highlights top MedTech trends anticipated to disrupt local healthcare practices within the next five years, guiding strategic planning for healthcare policy, resource allocation and patient care.

Methods

Applying ACE's HS methodology, we identified and analysed emerging MedTech from various sources addressing the top disease priorities in Singapore – cancer, cardiovascular, diabetes, dementia, musculoskeletal disorders. Working alongside a Workgroup of mainly clinical experts, key trends were derived through systematic filtering, thematic analysis, expert consultation, evidence scan and stakeholder consensus (Figure 1).

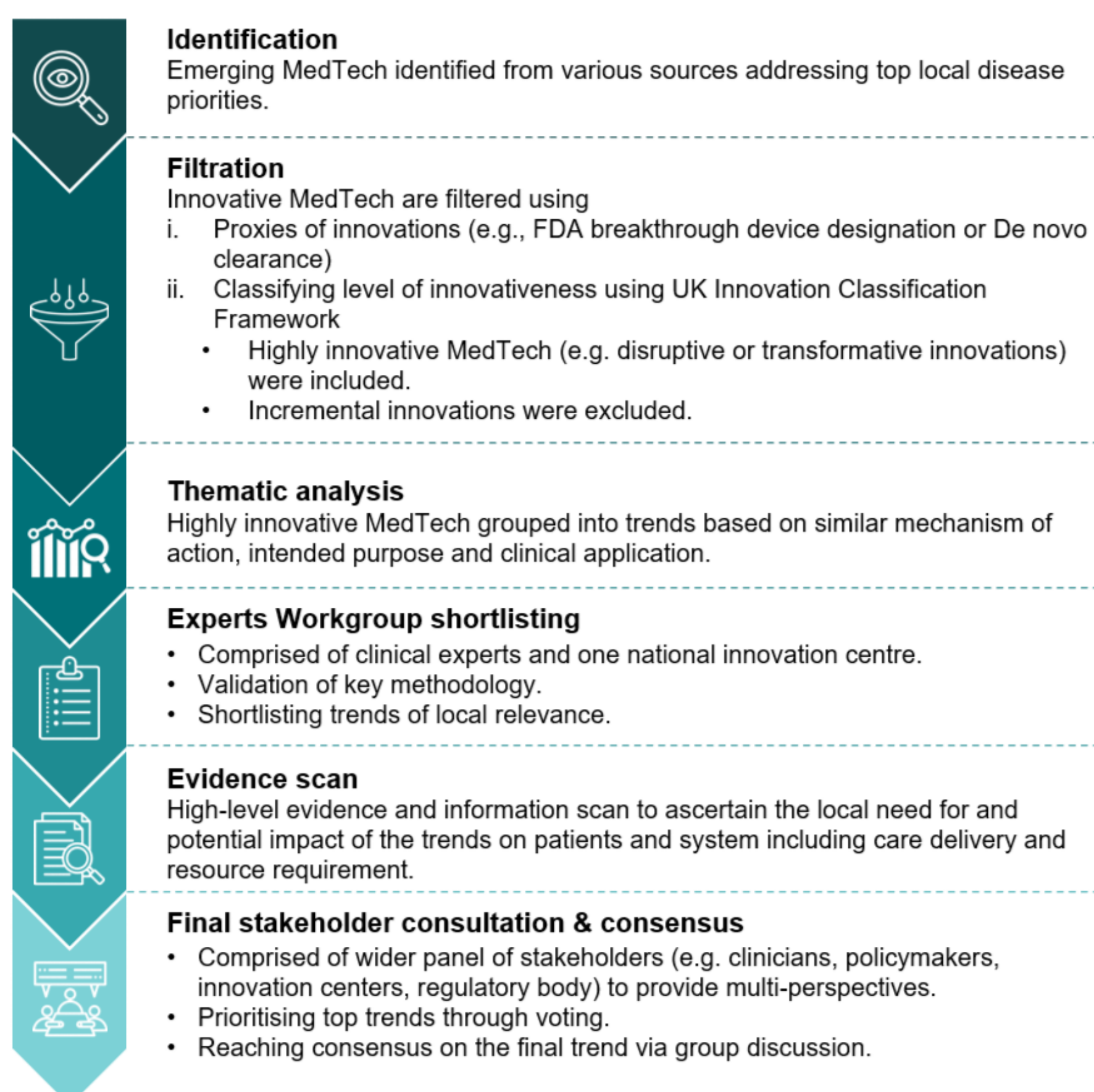


Figure 1: Overview of key methodology and process to derive top trends

Results

Of 1,870 MedTech identified, 228 addressed the top local disease priorities and met the innovation criteria. Following thematic analyses, 22 trends 6 individual MedTech which could not be grouped into any trends were derived. Among these, 14 trends were selected by the clinical expert Workgroup to be of highest local relevance. Through evidence review and multi-stakeholder voting, 9 key MedTech trends were prioritised with consensus (Figures 2 and 3).

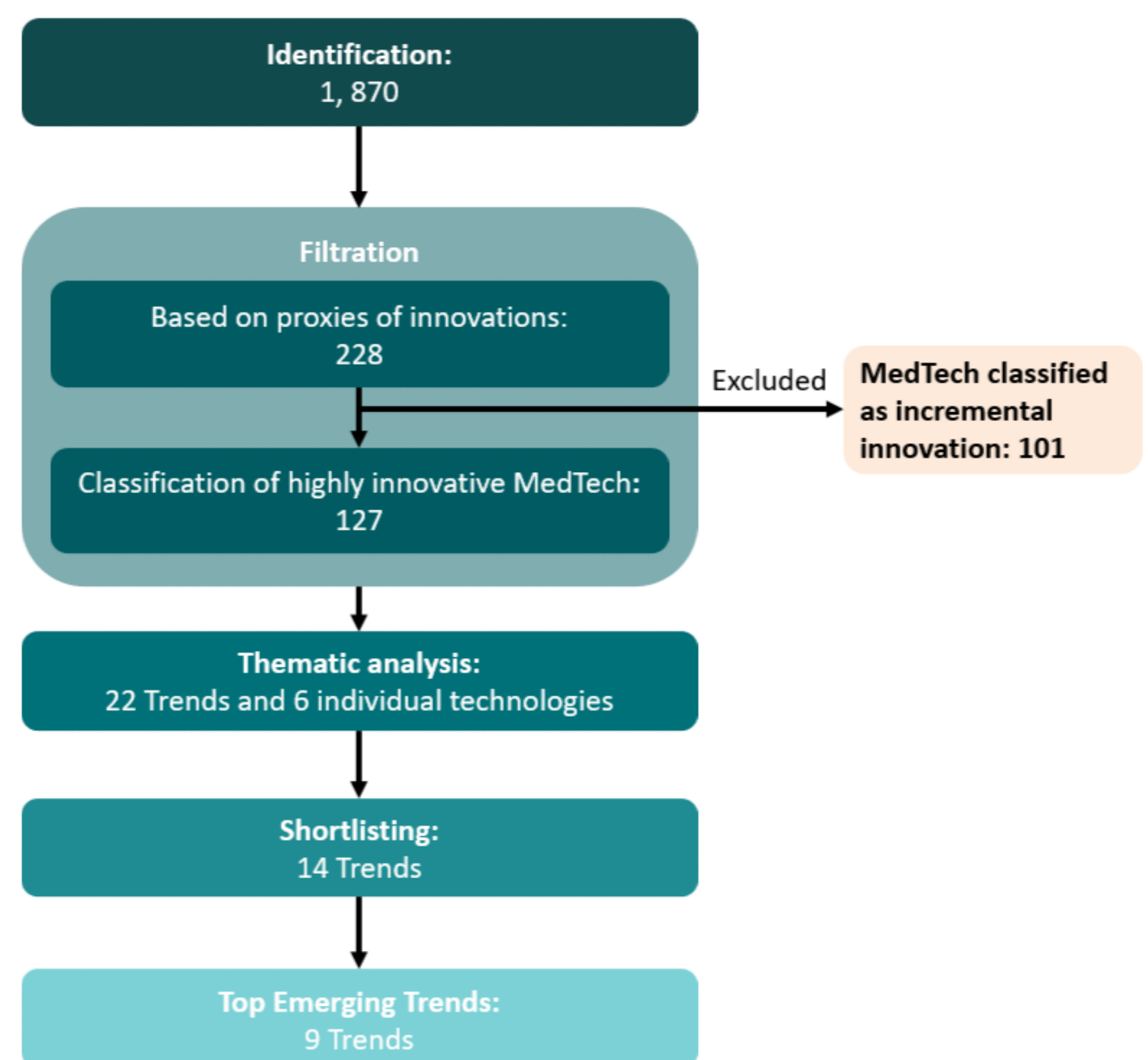


Figure 2: Key summary of results

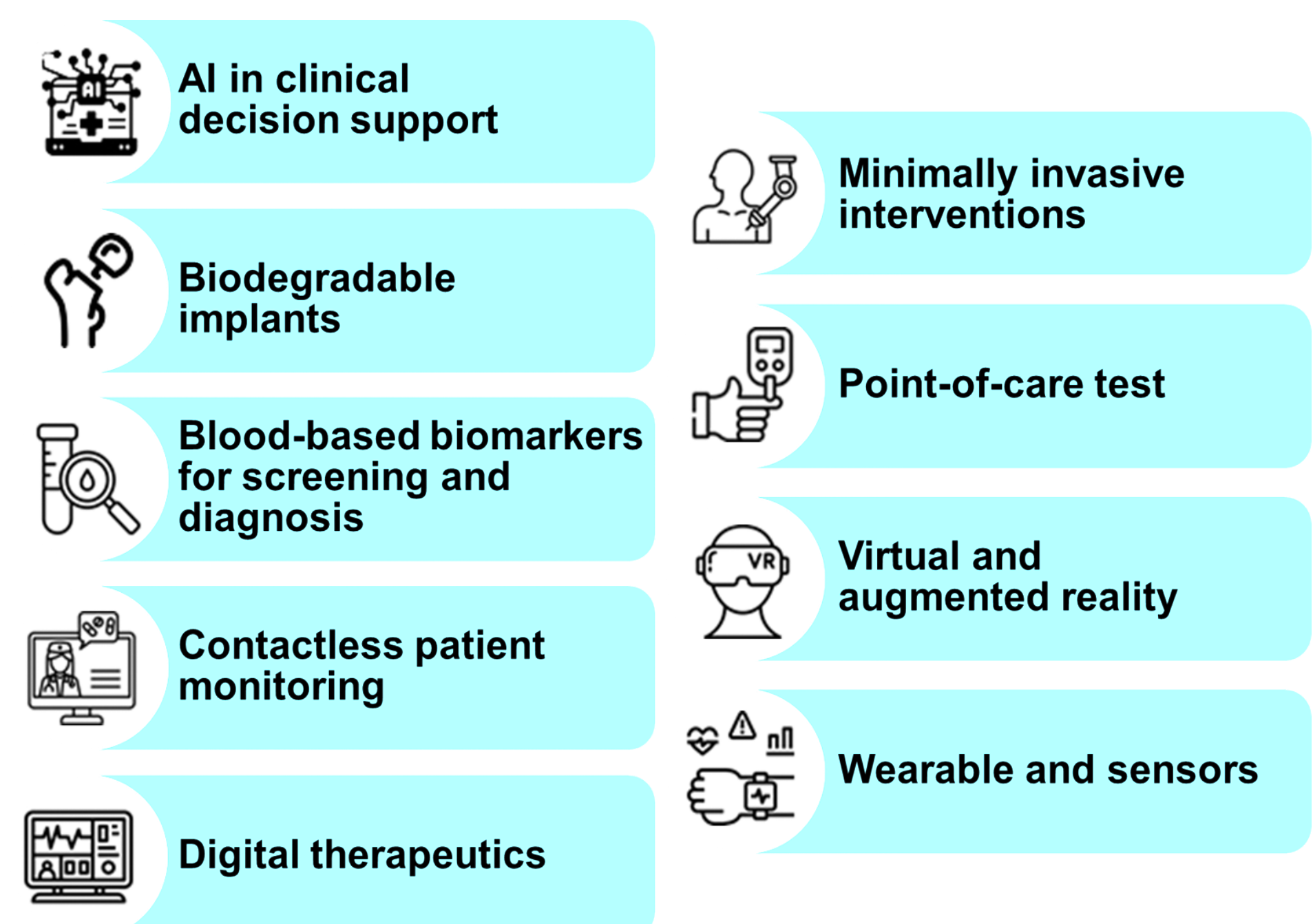


Figure 3: Top Emerging Medical Technology Trends in Singapore
Icons adapted from www.flaticon.com

Conclusion

- Through a multi-stakeholder effort across healthcare professionals, policy makers, regulatory bodies and innovation sectors, the inaugural ITR provides a holistic overview of the top emerging MedTech trends poised to disrupt healthcare practices in Singapore.
- Future iterations of the ITR may focus on specific disease areas or care settings, with additional stakeholder involvement, to provide more comprehensive and targeted insights for strategic planning.