

Development of implementation strategies for using a web-based app for screening in men in the primary care setting

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BACKGROUND AND OBJECTIVE

- A web-based app for screening men was developed to increase the uptake of preventive screening men, a serious gap globally.¹
- The web-based app has yet to be implemented in primary care settings.
- The objective of this study was to explore the barriers and facilitators to implementing a web-based app for screening men in the primary care setting and to select and develop implementation strategies to implement a web-based app for screening men in the primary care setting.

STUDY DESIGN

Phase I: Qualitative study

- Semi-structured in-depth interviews and focus group discussions based on the Tailored Implementation for Chronic Disease (TICD) framework.²
- Audio recorded then transcribed verbatim.
- Data analysed using directed content analysis with a deductive approach.³
- Data not coded in TICD was analysed thematically.
- Coded data was rated using a process by Damschroder & Lowery to determine the barriers and facilitators.⁴



Phase II: Selection and development of implementation strategies

- Exploratory methods were used.⁵
- Brainstorming session with experts in primary care, implementation science and the web-based app developer to brainstorm strategies to address the barriers and facilitators.
- Strategies were refined and categorized using the Expert Recommendation for Implementing Change (ERIC) taxonomy of implementation strategies.⁶

POPULATION STUDIED

- 3 government health clinics in an urban city in Malaysia.
- Participants were health care providers and patients attending the clinics.
- Purposive sampling was used.

PRINCIPAL FINDINGS

Table 1. Determinants to implementation of ScreenMen

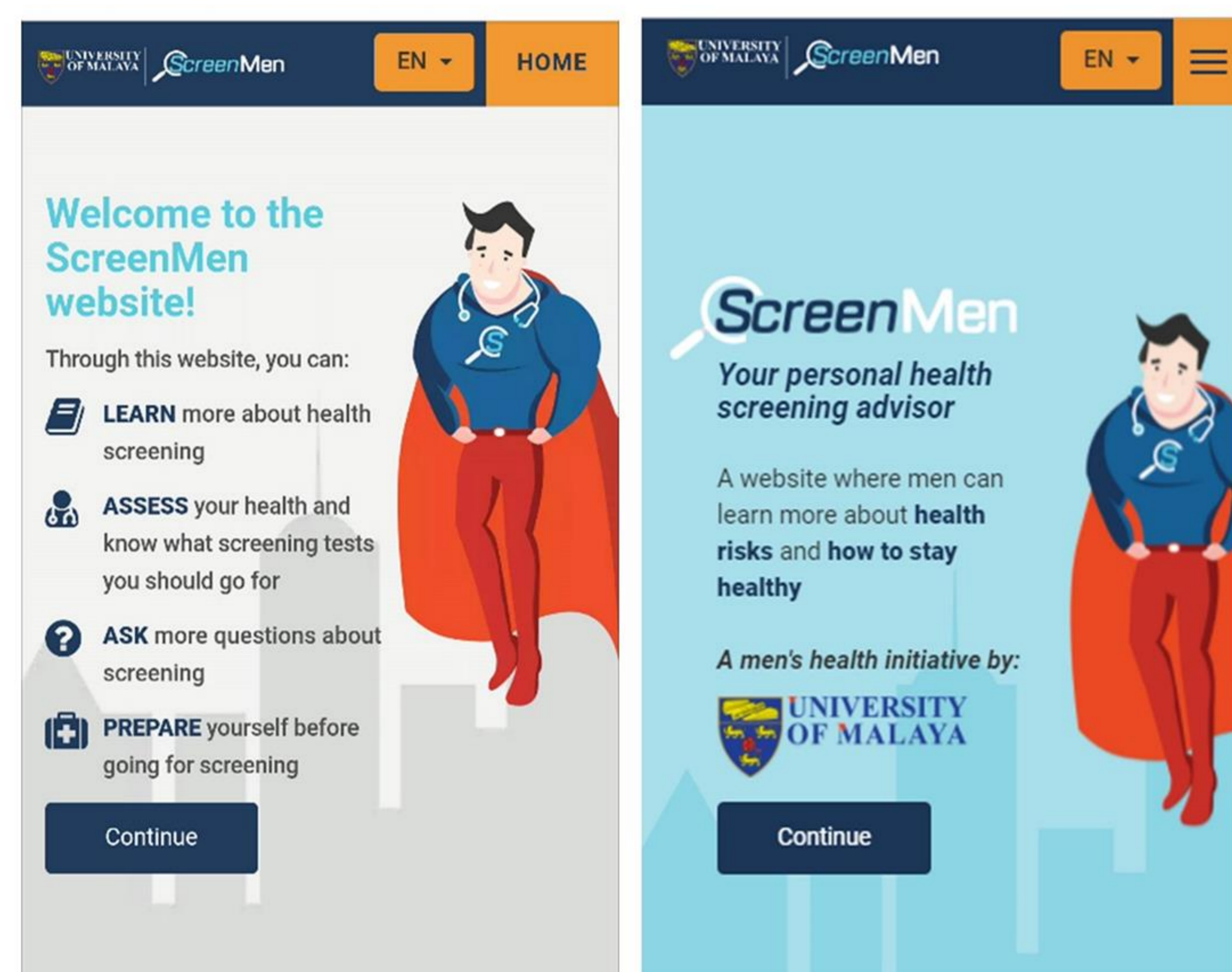
TICD Domain	TICD concept ²	
	Barriers	Facilitators
Guideline factors	Effort.	Feasibility; Accessibility of the intervention; Compatibility; Trialability.
Individual health professional factors	Awareness and familiarity with the recommendation; Domain knowledge; Skills needed to adhere; Nature of the behaviour; Capacity to plan change.	Attitudes towards guidelines in general.
Patient factors	Patient needs; Patient belief and knowledge; Patient behaviour.	Patient preferences.
Professional interactions	-	Team processes.
Incentives and resources	Availability of necessary resources; Information system.	Nonfinancial incentives and disincentives.
Capacity for organisational change	Regulations, rules, policies.	Mandate, authority, accountability; Monitoring and feedback.
Social, political and legal factors	-	Influential people
Not in TICD	Language	

Table 2. Implementation strategies to address the determinants

Implementation strategy ⁶	Determinants addressed
Involve executive boards.	Mandate, authority, accountability; Influential people.
Mandate change.	Mandate, authority, accountability
Provide education and training	Feasibility; Accessibility of the intervention; Compatibility; Trialability; Awareness and familiarity with the recommendation; Domain knowledge; Skills needed to adhere; Nature of the behaviour; Capacity to plan change; Attitudes towards guidelines in general; Patient preferences; Patient needs; Patient belief and knowledge; Patient behaviour; Language.
Create new clinical teams/Identify and prepare champions.	Team processes.
The use of information and communication technology.	Information system; Regulations, rules, policies.
Remind clinician.	Nature of the behaviour; Capacity to plan change.
Develop and organize quality monitoring system.	Monitoring and feedback.
Alter incentive/allowance structures.	Nonfinancial incentives and disincentives.

THE INTERVENTION

ScreenMen is a web-based app that was developed using evidence-based approach and male-sensitive attributes to cater for the needs of men.¹



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CONCLUSION

In this study, we report the development of implementation strategies to implement a novel web-based app for screening in men in primary care settings. Using implementation science frameworks and methods, we assessed the determinants, and developed strategies to address barriers and facilitators to implementation using a systematic and evidence-based approach.

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