

ASSESSING THE QUALITY OF MOBILE APPS FOR CHRONIC DISEASE MANAGEMENT



1 in 3
Canadians
reported using a
mobile health app
in the last 3 months

Mobile phone applications are increasingly used for health-related purposes

Mobile health is defined as the “spread of mobile technologies as well as advancements in their innovative application to address health priorities” (WHO, 2011)

Mobile apps can be used for education, self-monitoring, and feedback

Clinicians, researchers and policy makers need to support patient use of apps

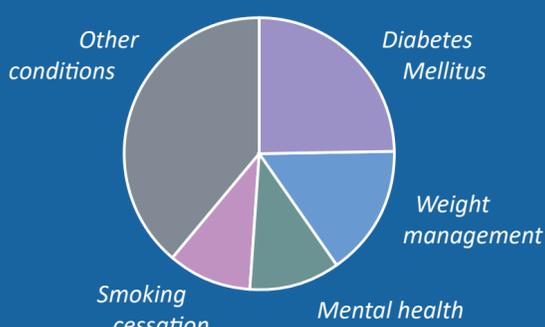
It is a challenge for clinicians, policymakers, and patients to understand which apps are most likely to provide benefit to patients



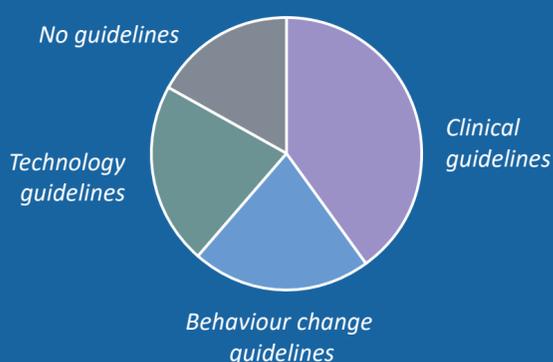
The objective of this study was to review and synthesize quality criteria for mobile apps used for chronic disease management

QUALITY CRITERIA USED TO ASSESS MOBILE APPS

A scoping review of 65 studies evaluated the quality of mobile apps used for:



Types of guidelines used to inform the development of quality criteria:



6 categories of quality criteria

- General characteristics (price, ratings, target user group, platform)
- Technical features (technology and access)
- Trust in information provided
- User experience 
- Influence of the app on health behaviour and user engagement
- Empirical evaluation of the impact of the app on outcomes

MESSAGES TO STAKEHOLDERS

Clinicians

Clinicians should work with patients to find high quality apps that meet their needs.

Clinicians should be up to date with the growing literature about the quality and effectiveness of mobile health apps.



Policy-makers and Researchers

Policy-makers and researchers should evaluate the quality of apps across the six identified criteria (see above), especially regarding usability and the influence of the app on patients' health behaviour and needs.

App Developers

Attention should be focused on the usability of the app as much as the influence of the app on health behaviour and user engagement, so that patients are able to easily integrate the app in their daily activities.



Patients

Patients should discuss their preferences, needs and comfort with technology with their health care providers so they can choose the most appropriate app together.



RECOMMENDATIONS

The scoping review led to the identification of 3 goals to guide future attempts to build quality criteria for mobile apps for chronic disease management:

- Evaluation of usability and impact in real world use is crucial
- Inclusion of health behaviour change principles and theory should be a priority
- Mobile apps should be aligned with patients' needs



IMPACT Based on the recommendations resulting from this review, clinicians and patients will be able to identify the most appropriate mobile apps for chronic disease management, leading to better health outcomes and improved quality of life.

NEXT STEPS

Further research is needed to establish a more consistent and credible approach to identifying the criteria likely to represent overall mobile app quality and effectiveness.

For more information:
Visit spor-pihci.com, or read:

Agarwal P, Gordon D, Griffith J et al. Assessing the quality of mobile applications in chronic disease management: a scoping review. NPJ Digit Med. 2021 Mar 10;4(1):46.

