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Health App Policy: International Comparison of Nine Countries' Approaches

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Introduction

Problem

With the advent of modern technology, digital innovations promise to revolutionise convenience and efficiency of patient care, improving patient care standards. However, many consumers and healthcare providers alike struggle with how to best make use of health apps, as well as how best to choose one for their needs.

Potential Solution

Many people are looking towards authorities to regulate health apps to ensure quality standards, but governments have varied progress worldwide. Applications should also play a role in this regulation.

Research Aim

This study aims to compare various national policy approaches for health apps in nine countries and provide possible recommendations that may be helpful for guiding future policy developments to these countries.

Methods

Document Review and Analysis

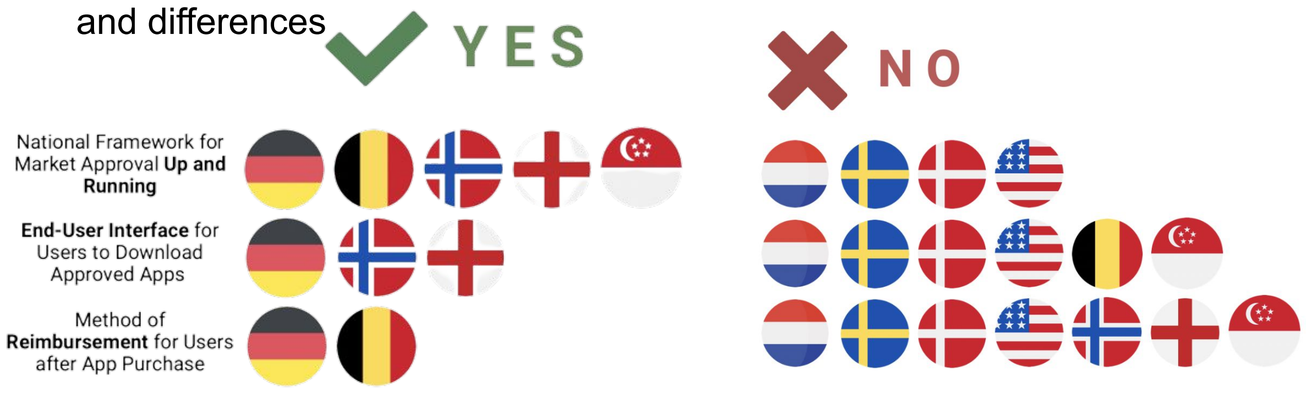
healthcare legislation, national strategies and e-Health reports, technology and e-service standards

Interviews with Experts

emails and phone calls

Results and Discussion

The 9 countries are at different stages of development of their policy. The diagram below aims to provide a visual summary of the key similarities and differences



Health policy across countries are noted to share certain similarities: the organisation that **developed** the framework is a branch of the government, usually its healthcare arm, the framework is **centralised**, and policy is based upon local laws. This government-centric, centralised policy upholds a certain standard for all health apps, but avoidance of third parties to approve health apps will lead to administrative backlog as the number of apps in the market increases.

Honesty

Transparency

Apps should accurately describe its features and user-end instructions to minimise chances of misinterpretation. Furthermore, users should also be accurately informed with how their data is utilised

Accountability

Apps must also take responsibility for how they change the health and behaviour of their users

Sweden

Sweden has, in addition to requiring apps to list its financial disclosures also strongly recommends adding a contact number representing the health app manufacturer under 'Additional product information'

Information

Health Content

Information and services offered by health apps must be evidence-based.

Information Quality

Health Information must presented in a way that is clear, accurate and regularly updated

Germany

Germany requires developers to show quality of proof of its 'positive care effects' and medical quality.

Technical Content

Usability

Apps must be operable by their intended audience, including to those with poor literacy or mobility.

Interoperability

Apps should also be able to exchange data with electronic medical records for greater utility.

England

Apps are evaluated with a benchmark (DTAC Standard) in accordance to industry standards on the grounds of reliability and interoperability

Data Protection

Security

Measures should be put in place to ensure apps are protected against data theft and malware.

Privacy

Users should be able to decide when their data is shared with third parties

Singapore

Singapore requires apps to meet various different ICT criteria regarding data privacy, authentication, identification as well as therapeutic relationship and informed consent

Conclusion

Traditional national policies are less effective in regulating medical information. Instead, standards and guidelines can play an important role as a novel kind of governance. A balance must be sought between detailed evaluation criterion on the one hand, and the applicability of frameworks on the other. Usability of the frameworks is also important. Some recommendations include having more cross-country cooperation to allow for easier experimentation for safe and effective health apps. Future developments should aim to achieve a state where a clinician is able to prescribe an appropriate app for the patient, making it easy for the patient to access the intended product, which would interoperate with their electronic health record.

Acknowledgements

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