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What is readiness, and how is it related to digital tools like remote patient monitoring?

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The challenge

Readiness is an emerging concept that has important implications for healthcare services undertaking digital health transformation. Although the term readiness has existed in academic literature for decades, and across business and education settings, it has recently been used for digital health.

This snapshot will explain the state of the evidence, using remote patient monitoring (RPM) as an example, but it can apply to any digital tool. Three different terms are relevant to readiness:

- Digital readiness is an individual's motivation and competence to effectively adopt, use, and spread digital technology, and can encompass digital access and usage, digital literacy, and digital health literacy. It can be used broadly across all digital tools, or specific to a given digital tool such as remote patient monitoring.
- Organisational readiness is the shared resolve and the collective ability of organisational members to implement a change.
- Innovation readiness considers readiness for change across the entire innovation cycle from idea through to execution (in comparison to organisational readiness which specifically measures the successful adoption of new innovations).[1]

Why do we need to consider readiness?

Digital health interventions and tools are typically tested in effectiveness studies, such as randomised controlled trials. However, once there is evidence that an intervention or tool works, actual uptake and adoption are slow, due to many sociotechnical, organisational, or cultural barriers.[2] This issue is thought to be due to levels of readiness. Research shows that half of all efforts to introduce anything new to an organisation will fail due to low readiness for change.[3] Additionally, even when an organisation has high levels of readiness, clinicians or patients may need additional training or education in order to be ready for a given digital intervention.

What we did

This snapshot uses a non-systematic approach, rapidly reviewing the most relevant, recent, and high quality evidence to answer this question. The evidence is reviewed alongside one academic expert and one content expert, in order to produce a brief evidence summary that is "good enough" to inform health services of relevant topics.[4] This document alone is not sufficient to solely inform decision-making.

What does the evidence say about readiness?

Readiness is dynamic. An organisation, clinician, or patient may have high levels of readiness for remote patient monitoring at one time point, but low levels at another time point, due to a change in structural factors or declines or improvements in disease condition.[5] Alternatively, an organisation, clinician, or patient may have high levels of readiness for one digital intervention like remote patient monitoring, and at the same time have low levels of readiness for another, such as an electronic medical record (EMR) alerting tool.[6]

Readiness affects multiple levels, but we don't have a comprehensive approach yet. An analysis found that readiness issues were present at multiple levels: 1) market, policy or governmental; 2) commercial, organisational, and infrastructure; and 3) professional, patient, and carers.[2] Thinking about readiness beyond just the individual and organisational level may be needed.

The concepts of motivation and competence, which both make up readiness, are different. Motivation is mainly a mind-set, which is related to confidence, while competence is mainly a skill set that can be learnt. Research has proposed that competence, rather than motivation, impacts digital readiness more significantly, and might be addressed by teaching relevant skills.

Trust is related to readiness. For example, poor capability to manage health-related data, as well as lack of governance, may be dealbreakers for readiness and should be carefully considered prior to implementation of digital tools in healthcare.[6]

There are several things we don't know. Inconsistent ideas of what it means to be ready; few reliable, valid, and practical tools for measuring readiness; limited knowledge of the conditions that promote readiness; and limited evidence that readiness matters.[5]

How has readiness been used so far?

- reviewing the evidence for readiness of remote patient monitoring in managing post-operative care, with results showing too little data to conclude anything.[7]
- using organisational readiness to understand how different digital health tools can be implemented such as in dermatology[8] and cardiology[9] in the US VA, and healthy lifestyles in child healthcare in Europe[7]
- comparisons of patient readiness for digital health between countries,[9] and within certain healthcare settings such as primary care[11]
- developing measures to assess readiness[12,13]
- and developing healthcare workforce readiness for digital transformation.[14]
- What this means for health services
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The DELIVER Research Project:

- Identifies what the people and healthcare providers of western Victoria need most in terms of home-based healthcare services
- Designs and tests the best way to deliver these services, so that home-based healthcare services will continue to grow and improve across the region and beyond
- Supports the growth of research in western Victoria, so that future research findings can quickly be translated to improvements in healthcare

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