Lecture Notes in Networks and System

Integrated remote primary care infrastructure: A framework for adoption and scaling of remote patient management tools and systems

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Abstract

Digital health technologies have for number years now been expected to reduce the skyrocketing health related costs as well as the care burden on traditional healthcare systems. However, their adoption and scaling have consistently been unsatisfactory and sometimes, outright disappointing. Scholars have offered several valuable, insightful, and pertinent contributions to address the above challenge. However, these contributions are in most cases atomistic, transitory, non-spatial, and dispersed. The above state of affairs has left practitioners in limbo as to where and when to apply which insights to what type of digital health intervention and in which context. In this article, a new holistic and integrated theoretical framework, specifically focusing on remote patients' health management tools and systems (RPMTSs) used to engage patients and potential patients at distance or away from healthcare facilities is proposed and introduced to address the above existing fragmentation and gaps. The new framework demonstrates how a clear and holistic understanding of "adoption" and "scaling" processes in the context of a given type and nature of digital health intervention along with an adaptive complex, processual and systems thinking approach can help confront the complexity of the healthcare apparatus while at the same time responding to its constantly evolving, dynamic nature with "agents" who may sometimes act irrationally or behave in unpredictable ways. In the process, a new framework is added to the knowledge base to guide and support the adoption and scaling of RPMTSs.