



## eHealth Technology: What Do We Know and What do We Need to Learn

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eHealth is the use of information and communication technologies for health. eHealth serves multiple utilization purposes for storage, exchange, and retrieval of digital data for administrative, clinical, educational and research purposes. The ultimate purpose of the eHealth use globally is to promote health for individuals efficiently and effectively <sup>[1]</sup>.

A growing body of evidence reveals potential benefits of eHealth on delivery of health care that are cost-effective and responsive to patient's needs without compromising the quality of service <sup>[2]</sup>. Systematic reviews revealed promising results on improvement of patient outcomes with implementation of eHealth services <sup>[3]</sup> especially with challenging behavioral lifestyle modifications such as improving medication adherence <sup>[4]</sup> physical activity <sup>[5]</sup> and HIV prevention <sup>[6]</sup> as well as addressing mental health <sup>[7]</sup>.

With the continuous evolution of eHealth services, challenges to its application and utilization are on rise. Systematic review identified multiple challenges. First, stakeholders and systems users need to have enough training to use the eHealth technology effectively and optimally. Second, the robustness of the technology and its interoperability such as integrity of data and security concerns <sup>[8]</sup>. Third, capital and startup costs and maintenance can be too costly. Fourth, legal clarity and legal framework challenge relates to legal issues such as privacy <sup>[9]</sup>. Fifth, organizational context pertains to the environment where eHealth technology is utilized <sup>[10]</sup>. A critical focus on the emerging technologies currently provides the next context for the integration of eHealth data in every aspect of human activity. The Internet of Things will cause an unpredicted explosion in the delivery of directed custom-made eHealth services to human beings; and thus, the new generation of eHealth data movement will exploit this feature to its full potential. In a way the matching of eHealth services to human needs will incorporate the identification, distribution, and management of many machine-generated eHealth data.

With the most documented challenges reported, what are the lessons learnt and how do we tackle them? Opportunities for confronting such challenges are proposed. Investment in advancing competencies of human resources in relation to information systems design and implementation as deemed crucial for optimal utilization of eHealth technology. Governments and national bodies should support eHealth technology to achieve its optimal purposes and become incorporated in health organizations. Researchers and clinicians also need to learn how to apply eHealth technology fully to extend their ability to study and influence health behavior as well as engage patients.

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## Biography

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