# Chapter 8
# My Digital Healthcare Record:
## Innovation, Challenge, and Patient Empowerment

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## ABSTRACT

*In the 21st century, the digital revolution is disrupting every sector of the economy. Australia has adopted the digital healthcare technological revolution such as My Health Record (MyHRC) to improve healthcare practice for clinicians/medical professionals and empower consumers to provide positive health management experience with a patient-centred approach to digital health revolution and digital literacy. My Health Record has its benefits, but it has been a challenge for the healthcare practitioners, hospital staff, as well as patients as consumers to accept, embrace, and uptake digital technologies and manage their healthcare records amidst concerns of slow adoption by the patient, data privacy, and implications of the secondary use of their personal data by non-government entities.*

## INTRODUCTION

In the 21st century, developed countries, have adopted digital health technological revolution to improve healthcare practices for clinicians/medical professionals, and provide positive experience to the consumers and the community at large. It has been a challenge for the healthcare practitioners, hospital administrative staff as well as patients to accept, embrace and uptake digital technologies and manage their healthcare records amidst concerns of slow adoption by the patient/consumers because of personal data privacy and security issues (Walsh et al., 2018). The main aim of embracing digital or e-Health technologies in healthcare, is to transform and provide world class healthcare system and hospital facilities and em-

power the patients to participate online, access their health information, communicate and control their personal health records and choose the right healthcare provider and treatment to improve their health and well-being (Archer et al., 2011; Baldwin, Singh, Sittig & Giardina, 2017; Kim & Johnston, 2002; Queensland Health, 2017; Sittig, 2002; Wood et al., 2013).

Medical technological innovation includes a wide range of products and services to treat medical conditions and diseases, for example, innovative healthcare services, medical devices such as e-Health, digital health record tools, healthcare transportation, 3D printing of medical products, tele-medicine, information technology, tele-health, mobile health technologies, artificial intelligence, health informatics and 'My Health Record' ['MyHRC'] (Guo, Chen & Mehta, 2017).

Digital revolution is disrupting every sector of the economy including healthcare in Australia. Digital revolution is driven by innovators of healthcare technologies, investors/entrepreneurs, medical professionals, healthcare providers and government policy makers to bring about a change in healthcare ecosystems. Any innovation, such as technological e-Health innovation needs to be diffused to be widely adopted and used effectively for its perceived advantage derived from its use and application (Lee, Hsieh & Hsu 2011; Roger, 2003).

Usually government policies and regulation drive or squash any type of innovation. It is essential that digital e-Health innovation is healthcare provider-friendly as well as patient-friendly (Hemsley, et al., 2016; Hemsley et al., 2017). A human and a patient-centred approach to digital health revolution, such as ''MyHRC'' will help to change the patient experience and empower them to embrace digital technologies and engage with digital technologies to access and manage their own health records with positive healthcare experience (Australian Government, 2016a & 2016b). Greenhalgh et al. (2010) describe it as a shift from 'specialists-driven' to 'patient-driven' self-managed care as we move from 'information-age' to' industrial-age', which empowers the patients/consumers.

There are many benefits of adopting e-health to the clinicians as well as to patients, who are empowered to engage with their 'MyHRC' to manage their health effectively. However, there are also many challenges in terms of English language literacy, internet literacy, health literacy, and key stakeholders' such as government and healthcare providers responsibility in ensuring privacy and safety of patient's data online (Russo, Sittig, Murphy & Singh, 2016; Sittig, Belmont & Singh, 2018; von Wagner, Steptoe, Wolf & Wardle, 2009). Literature review indicates publications on digital healthcare innovation, such as 'MyHRC' and mobile health adoption and patient empowerment is relatively an emerging new area of research.

This exploratory research examines the benefits and challenges of adopting digital MyHRC in Australia. The objective of this chapter is as follows. The first introductory section of the chapter introduces the growing importance and significance of digital health innovation and adoption in developed countries. Section two, provides the literature review on digital health innovation and patient literacy regarding digital health. Section three, discusses the case study example of Australia in adopting digital health strategies such as 'MyHRC'. Section four, lists the benefits and challenges from healthcare providers and patients/consumer perspective in adopting digital health platforms. Section five, presents discussions and recommendations for healthcare policy implications and proposes a model for diffusion of innovation of 'MyHRC', which can be tested in the future. Section six, provides conclusion and future research directions to advance the knowledge in the field of digital healthcare innovation and patient empowerment.

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