Chapter 9 Digitization of Mental Health Services: A Business Perspective

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ABSTRACT

The increase in awareness about mental wellbeing has necessitated an evolution in the services supporting patient-care needs. Digital innovation has provided the opportunity to increase accessibility of mental health care for people with diverse backgrounds and needs. In this chapter, the authors provide an overview of this innovation, taking a more business focused approach. Overall, the purpose of this chapter is to layout the current landscape of the industry, its implications, associated ethical and legal issues, and to build a roadmap for future development. To do so, the authors start with a discussion of customer and providers' motivation for using digital mental health services and associated challenges. The chapter then continues to discuss the growth of virtual identity and cognitive AI as digital therapeutics, concluding with current ethical/legal issues that need to be addressed for large scale deployment of digital mental health services in the future.

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INTRODUCTION

"What mental health needs is more sunlight, more candor, more unashamed conversation about illnesses that affect not only individuals, but their families as well."

-Glenn Close

Mental illness is a growing public health concern worldwide. In 2017, 10.7% of the global population experienced a mental illness, equivalent to nearly 792 million people (Dattani et al., 2021). The 2020 COVID-19 pandemic further exacerbated this crisis due to the accompanying social isolation, economic stress, loss of loved ones, and other struggles (Blumenfield & Levin-Scherz, 2020). Additionally, recent studies have found that getting infected with Covid directly increases the likelihood of developing mental health problems (e.g., depression, anxiety, and sleep disorders) during the month following the infection (Belluck, 2022). On the other hand, there has been a dearth of accessible mental healthcare due to the shortage of mental healthcare providers, long wait lines, as well as associated costs and stigma. This increasing gap between the demand and supply of mental health services calls for alternate solutions to meet patient-care needs.

Advancement in technology has opened a new frontier in mental health support by offering digital mental health services as an alternative and scalable model of care for narrowing this gap in service provision. In this chapter, we conceptualize *digital mental health service* as any online platform, website, or tool that provides customers the ability to care for their mental wellbeing. Technological platforms (e.g., computers and smartphones) are giving the public, doctors, and researchers new ways to access help, monitor progress, and increase understanding of mental wellbeing. By leveraging such platforms, well-established psychological treatments can be delivered directly to people with high fidelity and no-to-low human resources, empowering individuals to self-manage mental health issues (Andersson & Titov, 2014).

A wide variety of devices and mediums is available in the marketplace that can be leveraged to provide mental health treatment—e.g., online counseling, smartphone apps, virtual reality, and "serious games." As of 2021, the U.S. Food and Drug Administration (FDA) had certified nearly half a dozen digital mental health tools for diagnosing and treating mental and behavioral health conditions, including attention-deficit/hyperactivity disorder (ADHD), cognitive impairment, and substance use disorders (Marschall, 2021). While that number is small, many more digital mental health interventions are available to consumers without specific FDA approval or a prescription. For example, innovative mental health apps (e.g., Talkspace and Betterhelp) offer combinations of digital tools (e.g., self-help

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