# Chapter 6 Telemedicine Platforms and Telemedicine Systems in Patient Satisfaction

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# **ABSTRACT**

Telemedicine platforms and systems have gained significant popularity in recent years, offering a wide range of benefits to both healthcare providers and patients. Patient satisfaction plays a crucial role in assessing the success of telemedicine implementations. Telemedicine platforms provide patients with convenient access to healthcare services, allowing them to connect with healthcare providers from the comfort of their homes or workplaces. Telemedicine systems enable patients to consult with specialists who may not be geographically accessible. Telemedicine platforms and systems can significantly impact patient satisfaction by increasing accessibility, reducing wait times, improving communication, and enhancing the overall patient experience. Based on the above, it is intended to systematically review the bibliometric literature on telemedicine platforms and telemedicine systems in patient satisfaction using the Scopus database with the analysis of 94 academic and/or scientific documents

# 1. INTRODUCTION

The healthcare sector experiences multiple challenges, from increasing medical needs to high costs of care, inadequate medical resources, and high patient expectations. As a result, advanced technologies are continuously adopted to address these challenges and improve the quality of care, accessibility, and affordability. Telemedicine involves the use of information and communication technologies (ICTs) to deliver healthcare services, especially when distance is a crucial consideration. Pandian (2016, p.29)

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defines it as "the use of telecommunication and information technologies to exchange health information and provide health care services across geographic, time, social and cultural barriers." This innovation dates back to 1879 when the Lancet journal documented the first medical telephone consultation (Flumignan et al., 2019). Since then, healthcare facilities and practitioners have continued to adopt and use these innovations for various applications, increasing patient access to specialists, reducing the need for in-person consultation, and facilitating remote monitoring. Consequently, the increased use of telemedicine has led to improved patient satisfaction.

Patients leverage ICT tools to access high-quality healthcare services that would have been otherwise impossible due to geographical barriers. They can access healthcare providers from the comfort of their homes or workplaces (Abdulwahab & Zedan, 2021). As a result, telemedicine is also associated with reduced emissions since it eliminates the need for patients and staff to travel. It also reduces wait times and ensures patients with mobility issues can access necessary care. Phone consultations, video calling, and text messaging provide patients with real-time communication with their providers (Narasimha et al., 2016). For instance, Flumignan et al. (2019) found that more than a quarter of consultations in the US are conducted through telephone calls using platforms like Doctor On Demand, Pingmd, and HealthTap. In addition, Wang et al. (2019) found that teleconsultations reduce transportation costs by 45.5% and avert referrals by 80.8%. These findings reflect the impact of telemedicine in reducing costs, making care more accessible, and facilitating resource optimization. Pandian (2016) also found that telemedicine reduces the professional isolation of nurses, specialists, and other allied healthcare providers. The underprivileged populations in inaccessible and rural areas can leverage these innovations to access quality care at reduced costs. Ultimately, these benefits of telemedicine platforms and systems improve the quality of healthcare and patient satisfaction. This systematic review of bibliometric literature synthesizes data from 99 sources on telemedicine systems and platforms and their impact on patient satisfaction. This paper is organized in various sections, including an overview of telemedicine, its core technologies, and its impacts on patient satisfaction.

### 2. METHODOLOGICAL APPROACH

The increased adoption of telemedicine, especially during the COVID-19 pandemic, has led to increased research on its application and effectiveness in healthcare. Consequently, healthcare researchers and professionals have published vast amounts of data on the topic. Therefore, the systematic bibliometric literature review (LRSB) methodology was used since it provides a rigorous and structured method of analyzing and synthesizing large data volumes. In addition, LRSB facilitates the assessment of various methodological approaches employed in studies, thereby ensuring that high-quality and credible data is incorporated in the final reporting.

The Scopus database was used to search for and select relevant resources. This database was selected based on Baas et al.'s (2020, p.377) description of Scopus as one of the "largest curated abstract and citation databases." It includes a wide range of sources, such as conference proceedings, books, and journal articles covering multiple global and regional research. In addition, an independent Content Selection and Advisory Board indexes high-quality data through rigorous content selection and re-evaluation strategy.

In contrast to conventional literature reviews, the LRSB adopts a comprehensive approach when examining the published literature pertaining to the research topic (Rosário & Dias, 2023; Rosário, et al., 2021; Rosário & Dias, 2023).

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