

Increasing Access To Physical Therapist Services: Research On Telerehabilitation



Before its rapid expansion in response to the COVID-19 pandemic, telehealth was already being used to treat patients with chronic conditions such as renal disease, diabetes, mental health, and substance use disorders. The Centers for Medicare and Medicaid Services has concluded that telehealth offers the promise of a technology and approach to care for a broad range of populations, including those enrolled in Medicare. The agency's 2018 report "Information on Medicare Telehealth" pointed to emerging evidence that indicates that telehealth can empower both patients and health care providers to offer the best approaches to care that consider a patient's age, race/ethnicity, geographic location, and diagnoses, as well as provide high-quality care without increasing costs. The report also indicated that telehealth also can reduce disparities in care, especially in rural communities. While it does not eliminate the need for in-person visits, telehealth does increase access to a greater variety of providers and can enhance delivery and coordination of care (Scholten, 2019).

The following studies demonstrate the potential for cost savings, improved outcomes, increased access, and higher patient satisfaction through the use of telerehabilitation.

The Role of Virtual Rehabilitation in Total and Unicompartmental Knee Arthroplasty [J Knee Surg. 2019 Jan;32(1):105-110.]

Conclusion: Virtual rehabilitation is effective for certain patients and enables on-demand rehabilitation, offers cost savings, allows for coordination of care, and may improve adherence and patient satisfaction.

Telerehabilitation Booster Sessions and Remote Patient Monitoring in the Management of Chronic Low Back Pain: A Case Series [Physiother Theory Pract. 2018;34(5):393-402.]

Conclusion: Patients with chronic low back pain may benefit from the use of telerehabilitation booster sessions and remote patient monitoring in long-term management of their condition.

Telehealth Implementation in a Skilled Nursing Facility: Case Report for Physical Therapist Practice in Washington [PTJ. 2016;96(2):252-259.]

Conclusion: Telehealth implementation in a skilled nursing facility for the purpose of physical therapy reevaluation is a feasible alternative to in-person encounters.

Effects of Physical Therapy Delivery Via Home Video Telerehabilitation on Functional and Health-Related Quality of Life Outcomes [J Rehabil Res Dev. 2015;52(3):361-370.]

Conclusion: This study of the Rural Veterans TeleRehabilitation Initiative (RVTRI) found that home-based telerehabilitation significantly improved functional independence, cognition, and patient satisfaction.

Effectiveness, Usability, and Cost-Benefit of a Virtual Reality-Based Telerehabilitation Program for Balance Recovery After Stroke: A Randomized Controlled Trial [Arch Phys Med Rehabil. 2015;96(3):418-425.e2.]

Conclusion: Virtual reality-based telerehabilitation interventions were as effective as in-person rehab at helping patients recover balance skills after stroke at less cost.

Case Studies in Physical Therapy: Transitioning a "Hands-On" Approach Into a Virtual Platform [Int J Telerehabil. 2018;10(1):37-50.]

Conclusion: Patients who were assessed and treated for musculoskeletal disorders by a physical therapist via live, secure video reported improvements in movement and function in fewer than four visits and maintained this reduction after three months.

Telerehabilitation for Treating Pelvic Floor Dysfunction: A Case Series of 3 Patients' Experiences [J Women's Health Phys Ther. 2019;43(1):44-50.]

Conclusion: Telerehabilitation has the potential to deliver high-quality care for pelvic floor dysfunction and greater access to physical therapists for both initial and follow-up visits.

Clinical Outcomes of Remote Asynchronous Telerehabilitation Are Equivalent to Traditional Therapy Following Total Knee Arthroplasty: A Randomized Control Study [J Telemed Telecare. 2017;23(2):239-247.]

Conclusion: Patients who received rehab via real-time video after knee replacement reported similar clinical outcomes and satisfaction compared with patients who received traditional care.

Efficacy of Home-Based Telerehabilitation vs In-Clinic Therapy for Adults After Stroke: A Randomized Clinical Trial [JAMA Neurol. 2019;Jun 24. doi: 10.1001/jamaneurol.2019.1604.]

Conclusion: Poststroke activity-based training resulted in substantial gains in patients' arm motor function, whether provided via telerehabilitation or traditional in-clinic rehabilitation.

Telemedicine and Multiple Sclerosis: A Comprehensive Literature Review. [J Telemed Telecare. 2019;May 1. doi: 10.1177/1357633X19840097.]

Conclusion: For patients with multiple sclerosis, telerehabilitation was shown to be "beneficial, cost-effective, and satisfactory for patients and providers."