

Home-Based Telerehabilitation as an Effective Alternative to In-Clinic Therapy for Stroke Survivors

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Stroke remains one of the leading causes of long-term disability worldwide and frequently results in persistent motor impairments that reduce mobility, independence, and quality of life. Although traditional in-clinic rehabilitation is effective in promoting recovery, many stroke survivors encounter barriers that limit consistent participation in therapy, including transportation difficulties, financial costs, geographic distance, and unequal access to rehabilitation specialists. These challenges have contributed to growing interest in home-based telerehabilitation as an alternative approach to stroke recovery. This literature review examines current research comparing home-based telerehabilitation with conventional in-clinic therapy for stroke survivors. Evidence from randomized controlled trials, qualitative studies, and technology-assisted rehabilitation research was analyzed to evaluate motor recovery, rehabilitation accessibility, patient adherence, neuroplasticity, and rehabilitation sustainability. Across the literature, home-based telerehabilitation consistently produced improvements in upper-extremity function, mobility, balance, and overall functional recovery comparable to those reported in traditional rehabilitation settings. Telerehabilitation programs also improved accessibility by reducing travel demands and increasing opportunities for continued participation in therapeutic activities. Several studies reported high patient satisfaction, strong adherence rates, and sustained engagement in rehabilitation programs, delivered through digital platforms. Although limitations remain, including variability in study design, technological accessibility, and the need for additional large-scale longitudinal research, the current body of evidence supports home-based telerehabilitation as an effective approach for many stroke survivors. Continued advances in digital rehabilitation technologies are expected to strengthen the role of telerehabilitation within modern stroke rehabilitation systems.