



**COVID-19 TELEHEALTH AND TELEREHABILITATION  
REFLECTIONS: IDENTIFYING SOCIOECONOMIC DISPARITIES &  
FORMULATING DESIGN RECOMMENDATIONS TO IMPROVE  
REMOTE STROKE REHABILITATION**

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Stroke is the leading cause of long-term disability in the United States, and rehabilitation is an important aspect of stroke survivors' recovery process. However, due to the disruptive nature of COVID-19 pandemic, health services and rehabilitation for stroke survivors have needed to be achieved remotely. Thus, telehealth and telerehabilitation has become a critical element in providing effective healthcare services. The following study was motivated to further understand the socioeconomic disparities that providers and patients experienced using telerehabilitation and inform the design of future telerehabilitation systems.

We conducted 20 semi-structured interviews that ranged between 45-60 minutes. In light of the COVID-19 pandemic, these interviews took place online via video conferencing platforms (e.g., Cisco Webex). The interviews were with medical rehabilitation specialists (Physiatrists, Occupational Therapists, Physical Therapists, Rehabilitation Psychologists and Neuropsychologists, Speech-Language Pathologists). We qualitatively analyzed interview/transcripts (i.e., open coded), and our analysis revealed several themes. Some of our findings are: (1) caregiver's role in effective telerehabilitation, (2) low health literacy of patients, (3) healthcare is more accessible to a specific population, (4) language barriers impact the efficacy of telerehabilitation (5) there is a loss of collegiality amongst colleagues, and (6) a virtual telerehabilitation system must be supplemented with physical objects. In the future, we will interview stroke survivors and caregivers and develop an ideal telehealth and telerehabilitation platform using the design requirements developed from our findings.

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