

Small Grant Summary Abstract: Telerehabilitation Effectiveness for Individuals with Temporomandibular Disorders (TMD): A Noninferiority Study

Pain from temporomandibular joint disorders (TMD) is a common musculoskeletal problem, second only to low back pain in causing pain and disability in the general population. Physical therapy (PT) is a successful intervention for these individuals but limited access to specialty care interferes with its use for pain management. Telerehabilitation has potential to provide quality care at lower cost to patients who would otherwise need to travel for in-person delivery. Telerehabilitation is also of interest to avoid the health concerns of the recent COVID-19 pandemic. However, no evidence exists regarding telerehabilitation for individuals with TMD. Without this knowledge, whether and to what extent PTs may successfully use telerehabilitation to increase access to care for this patient population remains unknown. The long-term objective of this proposal is to compare in-person versus telehealth delivery of physical therapy services for individuals with TMD. Based on literature evidence and unpublished patient satisfaction survey data from our multidisciplinary clinic, the central hypothesis of this project is that compared to in-person PT, telerehabilitation is equally effective with similar rehabilitation outcomes. To test this hypothesis, an open label preference non-inferiority trial will compare in-person and virtual evaluation and rehabilitation for individuals with TMD. *Regardless of outcome, study results will be significant as they will inform care pathways including underserved populations*. Study outcomes will quantify telerehabilitation effectiveness and contribute evidence examining a method that would increase care access for individuals with TMD. Clinically these results will inform how PTs can utilize telerehabilitation to improve care for individuals with TMD.