Digital care

- Evaluating Digital Rehabilitation Outcomes in Chronic Musculoskeletal Conditions Across Non-Obesity, Obesity, and Severe Obesity
- Does rehabilitation improve work participation in patients with chronic spinal pain after spinal surgery: a systematic review
- Predicting Pain Response to a Remote Musculoskeletal Care Program for Low Back Pain Management: Development of a Prediction Tool
- Exploring the Importance of Race and Gender Concordance Between Patients and Physical Therapists in Digital Rehabilitation for Musculoskeletal Conditions: Observational, Longitudinal Study
- Applying AI to Safely and Effectively Scale Care to Address Chronic MSK Conditions
- Recovering Work Productivity in a Population With Chronic Musculoskeletal Pain: Unveiling the Value and Cost-Savings of a Digital Care Program
- Digital Care Program for Urinary Incontinence in Females: A Large-Scale, Prospective, Cohort Study
- The potential of a multimodal digital care program in addressing healthcare inequities in musculoskeletal pain management

Digital care refers to the use of technology and digital tools to provide medical and health services and support. This includes telemedicine, remote patient monitoring, digital health apps and platforms, and other digital tools that help healthcare professionals diagnose and treat patients, manage chronic conditions, and improve overall health and wellness. The goal of digital care is to increase access to care, improve health outcomes, and enhance the patient experience.

Digital care programs (DCPs) for musculoskeletal pain management have risen as alternative care delivery models to circumvent challenges in the accessibility of conventional therapy. Despite the potential of DCPs to reduce inequities in accessing care, the outcomes of such interventions in rural and urban populations have yet to be studied.

The aim of the study was to assess the impact of urban and rural residencies on engagement and clinical outcomes after a multimodal DCP for MSK pain.

The study consists of an ad hoc analysis of a decentralized single-arm investigation into engagement and clinical-related outcomes after a multimodal DCP in patients with MSK conditions. Patients were coded according to their zip codes to a specific rural-urban commuting area (RUCA) code, and grouped into rural and urban cohorts. Their engagement, as well as clinical outcome, changes from baseline to program end were assessed. Latent growth curve analysis was performed to estimate change trajectories adjusting for the following covariates: age, gender, body mass index, employment status, and pain acuity. Outcomes included engagement, self-reported pain, Generalized Anxiety Disorder 7-item scale, Patient Health Questionnaire 9-item, and Work Productivity and Activity Impairment. A minimum clinically important difference (MCID) of 30% was considered for pain.

Patients from urban and rural residencies across the U.S. participated in the program (N= 9992). A 73.8% completion rate was observed. Both groups reported high satisfaction scores and similar engagement with exercise sessions, with rural residents showing higher engagement with educational content (P<.001) and higher program completion rates (P=.02). All groups showed a significant improvement in all clinical outcomes without inter-group statistical significance, including pain,

mental health and work productivity. The percentage of patients meeting the MCID was similar in both groups (urban: 67%, rural: 68.7%, P=.24).

This study advocates for the utility of a DCP in improving access to MSK care in urban and rural areas alike, showcasing its potential to promote health equity. High engagement, satisfaction, and completion rates were noted in both groups, as well as significant improvements in clinical outcomes [1].

1)
Scheer J, C Areias A, Molinos M, Janela D, G Moulder R, Lains J, Bento V, Yanamadala V, Dias Correia F, Costa F. Engagement and utilization of a complete remote digital care program for musculoskeletal pain management in urban and rural areas across the United States: Longitudinal Cohort Study. JMIR Mhealth Uhealth. 2023 Feb 2. doi: 10.2196/44316. Epub ahead of print. PMID: 36735933.