RESEARCH BRIEF
Can Physical Therapy Deliver Clinically Meaningful Improvements in Pain and Function through a Mobile App?: An Observational Retrospective Study

omada

Virtual Physical Therapy Program Delivers Significant Clinical Treatment Outcomes

A PEER-REVIEWED STUDY

Successful outcomes without the use of manual therapy, passive treatments, or in-person visits

STUDY SUMMARY

This study evaluated the success of a digital physical therapy (DPT) program delivered through a mobile app as a full replacement for in-office visits to treat muscle and joint conditions. The research builds on previous findings, which show that DPT is comparable to in-person care in delivering accurate physical assessments, diagnoses, and improvements in pain and function.

By broadening access to evidence-based care, DPT enables physical therapists (PTs) to treat more patients, regardless of their geography, comorbid conditions, or busy schedules. This results in more affordable care that prevents costly downstream procedures and reliance on addictive medications.

Researchers analyzed data collected from 814 working adults who enrolled as commercial users of a DPT program and completed their care between February 15, 2019 and December 31, 2020.

During onboarding, participants completed a digital intake form to record self-reported problem areas, functional deficits and pain levels. Then they received a consultation over live, HIPAA-compliant video with a licensed PT who performed a detailed evaluation and physical assessment. The PT then used the resulting information to design a customized treatment plan, which was managed by the same PT for the duration of the episode.

Virtual treatment used evidence-based care to focus exclusively on active interventions (therapeutic exercise and patient education) and eliminated passive procedures with limited evidence like electrical stimulation and ultrasound. The PT also assigned treatment activities and provided support through in-app messaging and additional follow-up video visits. After patients completed treatment, they were asked to fill out a final survey with the same measures of pain and physical function.

Researchers evaluated outcomes on the basis of two measurements: meaningful reduction in pain and increase in physical function. After controlling for demographics, comorbidities, and the severity and chronicity of conditions, two significant results became clear. Participants significantly improved pain and function after DPT treatment, with meaningful reductions in pain (-2.69 points on a 0-10 point scale). Researchers also noted improvements in physical function (+2.67 points on a 0-10 point scale).

KEY DEMOGRAPHICS

814
Study participants

40.9
Average age

391 / 423
Female / male split

KEY OUTCOMES

DPT led to successful treatment outcomes without the use of manual therapy or passive treatments, like ultrasound or electrical stimulation, or in-person visits.

Patients with a wide range of conditions, ranging in severity and chronicity, responded positively to DPT treatment. DPT removes barriers to the effective treatment of muscle and joint conditions by ensuring convenient access to evidence-based care. This in turn reduces the need for costly and unnecessary medications, injections, imaging, and surgeries.

-2.69 points

On a 0-10 scale, there was a significant decrease in pain, after controlling for comorbidities and demographics

+2.67 points

On a 0-10 scale, there was a significant increase in physical function, after controlling for comorbidities and demographics

>50%

Over half of participants had their initial consultation with their PT within 24 hours of enrolling for the program

WHAT THIS MEANS FOR BUILDING BENEFITS PACKAGES

Providing effective, evidence-based care early in a patient's care path can reduce the need for costly, and often unnecessary, medications, imaging, injections, and surgery.

Virtual physical therapy treatment is a cost-effective approach to care that delivers meaningful clinical outcomes by focusing on evidence-based treatment rooted in exercise and education. Omada for MSK is a virtual physical therapy program that can help:

- Remove barriers to care, including geography, transportation, comorbid conditions, busy schedules, or provider shortages
- Provide personalized, evidence-based care
- Reduce need for costly treatments
- Improve continuity of care
- Provide access to specialized providers
- Improve frequency of patient-provider interactions
- Enable quicker and easier appointment booking
- Provide flexibility to meet varying patient needs
- Make PT interactions more engaging with computer vision technology
- Improve overall patient engagement and clinical outcomes