



STUDY TITLE

The Effect of Mobile
Care Delivery on
Clinically Meaningful
Outcomes, Satisfaction,
and Engagement
Among Physical Therapy
Patients: Observational
Retrospective Study

How Virtual Physical Therapy Strengthens Patient-Provider Relationships to Drive Meaningful Clinical Outcomes

A PEER-REVIEWED STUDY

Improving access and engagement
through virtual channels

STUDY SUMMARY

A previous study showed that a physical therapy program delivered via a mobile app produced clinically meaningful changes in pain and function comparable to in-person care. But how does app-based physical therapy deliver good outcomes given that its care delivery varies significantly from traditional, in-person care? This study evaluated the effects of timely access to care, participant engagement, and the strength of participants' relationships with their physical therapists (PT) on an app-based physical therapy program's success (pain reduction, functional improvement, and patient satisfaction) by analyzing data from a group of 814 employed adults diagnosed with muscle and joint conditions. The participants accessed their PT and the related app through workplace-provided private insurance and completed their care between February 15, 2019 and December 31, 2020.

To identify the attributes of successful participants, the researchers considered the following factors:

- **Timeliness of access to care:** seeing a PT within 24 hours
- **Program engagement:** how many weeks they were in treatment and how many exercise sessions they completed each week
- **Patient-Provider relationship strength:** how many messages per week the PT sent, and how many follow-up visits the patient completed

Participant engagement led to pain reduction and functional improvement — in other words, participants who did their exercises and stuck with the program over time saw clinically meaningful results. PTs secured participants' engagement by establishing strong relationships with them. The sooner participants met with their PTs and the more they interacted with them during virtual follow-up visits and through in-app chat, the more patients improved their clinical outcomes.

The researchers measured overall patient satisfaction alongside symptom improvement. Participants who experienced significant improvements in pain and function and had stronger relationships with their PTs were more satisfied.

This study helps to establish best practices for virtual treatment: Providers should focus on breaking down barriers to access care, meeting patients through face-to-face video follow-up visits, and proactively communicating with patients to ensure they stay engaged with the program, which in turn, produces good clinical outcomes and satisfied patients.

KEY DEMOGRAPHICS

814

Study participants

40.9

Average age

391 / 423

Female / male split

KEY OUTCOMES

Timely access and patient-provider connections that encourage patient engagement are strongly connected to better outcomes.

14%

Increase in weekly workouts after initial evaluation with a PT

11%

Increase in weekly workouts through each additional weekly message

12%

Increase in the odds of reducing pain through each additional workout

4%

Increase in the odds of meaningfully improving function with each additional week of participation

2-3x

Participants with meaningful improvements in pain and function were about 2-3 times more satisfied

2-3x

Participants with more virtual visits expressed 2-3 times greater overall satisfaction

WHAT THIS MEANS FOR BUILDING BENEFITS PACKAGES

Digital physical therapy can be a powerful, effective alternative to in-office physical therapy if care delivery uses digital communication to strengthen relationships between providers and patients. Omada for MSK is a digital physical therapy program that can help improve:

- Access and continuity of care
- Access to specialized providers
- More frequent patient-provider interactions
- Quicker and easier appointment booking
- Flexibility to meet varying patient needs
- More engaging PT interactions with computer vision technology
- Improved overall patient engagement and clinical outcomes