

WHITE PAPER

RecoveryOne improves pain and function for individuals with low back pain.



Abstract

The burden of musculoskeletal conditions in the United States is immense – both physically for those experiencing pain and financially for the healthcare system. The rise of digital MSK care presents new opportunities to improve care access, quality, and cost. RecoveryOne is an end-to-end virtual MSK care solution designed to do precisely this.

As part of a retrospective observational study, researchers from Arcadia University examined RecoveryOne users with low back pain from January 2020 to March 2022. The findings reveal that RecoveryOne demonstrates meaningful change in pain and function for individuals with low back pain and requires a time commitment far less than that of traditional physical therapy.



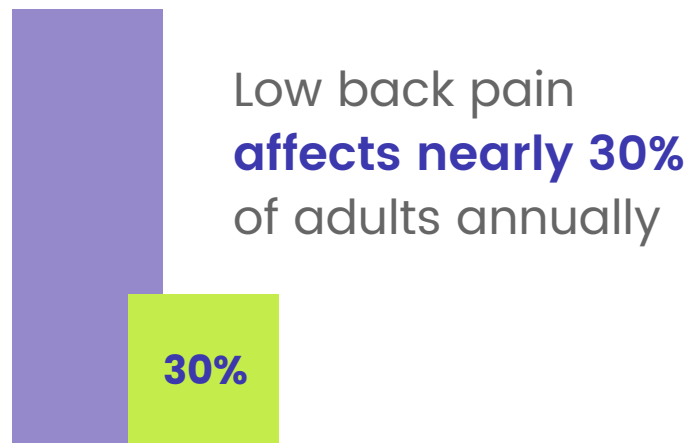
The magnitude of the MSK problem

Approximately 1 in 2 adults have a musculoskeletal (MSK) disorder.¹ And only a fraction of them undergo physical therapy treatment. In fact, a study from 2021 reported that only 24% of those with a PT referral actually accessed physical therapy for the treatment of their musculoskeletal conditions.²

Low back conditions account for a significant portion of these MSK disorders. Data shows that in the United States, low back pain affects nearly 30% of adults annually and is a leading cause of disability.^{3,4} Additionally, the total costs of low back pain in the United States are estimated to top 100 billion per year.⁵ Together, the mounting economic impacts, high physical health burdens, and low utilization of conservative treatments make MSK conditions like back pain a significant challenge for the United States healthcare system.



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The rise of digital MSK care

Digital Healthcare has been emerging over the last decade as a way to increase the reach of providers and their services to individuals who may not otherwise access healthcare due to time, location, or other barriers. This trend has been seen abroad and in the United States, with large organizations like the Department of Veterans Affairs and the Indian Health Service both utilizing telehealth to address provider shortages in musculoskeletal care.⁶

Primary care and other specialists have been utilizing technology in this way for years. But, specialties like physical therapy have only recently emerged because physical therapy was seen as a primarily hands-on profession, and there was no established reimbursement method for a digital delivery model. But when the COVID-19 pandemic made it difficult, if not impossible, for individuals with musculoskeletal conditions to access necessary physical therapy care, the Centers for Medicare and Medicaid (CMS) began supporting reimbursement for virtual physical therapy services under the Emergency Authorization Act.

Now that the pandemic has ended, it's becoming increasingly evident that telerehabilitation is here to stay and an effective tool to increase access and reduce the cost of MSK care. As different solutions emerge in the market, more information is needed about the clinical efficacy of digital MSK care compared to traditional in-person treatment methods.



Introducing RecoveryOne

In response to the ever-growing need for accessible care, RecoveryOne, an MSK care company, developed a digital solution to bring convenient, evidence-based musculoskeletal care to individuals upstream. When an individual enrolls in RecoveryOne, they schedule a virtual screening appointment with a physical therapist to determine the most appropriate program or “pathway” for them. A pathway is an evidence-based exercise therapy program designed for an individual’s specific MSK condition and further personalized based on their past medical history, goals, and lifestyle.

Once their pathway is assigned, members access their prescriptive exercises and other self-care educational resources on-demand via their phone, tablet, or computer. Each member is also assigned a dedicated, certified health coach to help with goal-setting, motivation, healthy habit formation, action planning, and behavior change. As the member moves through the phases of recovery, the RecoveryOne technology adapts the difficulty of their exercises based on continuous member feedback collected with exercise tolerance questioning and standardized pain and function surveys. RecoveryOne’s clinical support physical therapists monitor member progress and manually adjust their pathway as needed.

The study

To investigate the clinical efficacy of RecoveryOne for low back pain, researchers in the Physical Therapy Department of Arcadia University conducted an observational retrospective study examining users of the RecoveryOne product from January 2020 – March 2022. The goal of the study was to understand more about individuals with non-surgical low back pain, their usage of the product, and the clinical outcomes that occurred. In total, a sample of 910 participants was taken.

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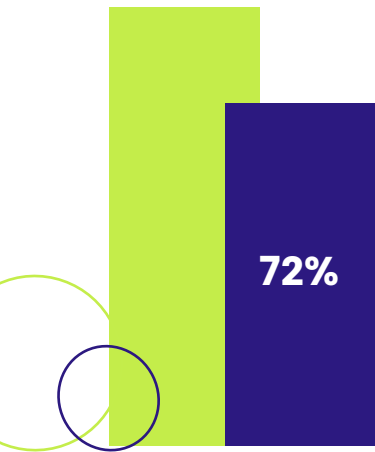
Results

Key Takeaways:

- 72% had a meaningful change in pain and/or function
- 3/10 average improvement in pain on the NPRS
- It only took an average of 5 minutes per day to elicit meaningful change



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When assessing alternative healthcare delivery models, it's important to consider how the results compare to those of traditional methods. To do this, researchers compared RecoveryOne participant results to the healthcare industry standards to determine clinically significant outcomes. For low back pain, three key outcome measures are considered: the Oswestry Disability Index (ODI), the Numeric Pain Rating Scale (NPRS), and the Single Assessment Numeric Evaluation (SANE).

Based on industry research related to these outcome measures, this study defined meaningful change as one or more of the following: a 30% improvement in the ODI, >1 NPRS improvement, and >7 SANE improvements. 72% of the 910 RecoveryOne members met one or more of these criteria, demonstrating a clinically significant improvement in pain and/or function. Examining pain outcomes with greater specificity revealed 65.1% had improved pain by 1 point or more on the NPRS with an average improvement of 3/10.

Additionally, when looking at the group that had a meaningful change versus those that did not, the significant difference was the average time the users spent using the product — those in the meaningful change group spent an average of just 5.4 minutes per day using the product versus those that did not have meaningful change, spent less than 1 minute per day on average. Those who interacted with the product more regularly demonstrated better outcomes.

Telerehabilitation, like RecoveryOne, is uniquely positioned to address the barriers of time and travel that often complicate in-person physical therapy treatment.

Even at 5.4 minutes per day, the average time commitment to achieve meaningful change with RecoveryOne is minimal compared to that of in-person physical therapy. Reducing program friction by eliminating travel and minimizing the time commitment is likely to contribute to improved adherence and outcomes for many individuals. RecoveryOne works with employers and healthcare management companies to empower their people to relieve pain and improve function by increasing the ease and accessibility of high-quality MSK care.

Learn more about how RecoveryOne can help your population achieve meaningful MSK results.

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