



PeerWell Reduces Outpatient Physical Therapy for Aging Total Joint Replacement Patients

Key Findings

- 58% of PeerWell patients were able to opt out of outpatient physical therapy
- The average number of outpatient physical therapy sessions for PeerWell patients was 2.04 visits compared to 7.4 visits in comparison group

About Core

The CORE Institute is a leading healthcare provider that offers comprehensive orthopedic,

neurological and physical therapy care to thousands of patients throughout the US. The organization is a leader in evidence-based musculoskeletal care with strategic partnerships and initiatives that drive value and improve the quality of patient care. The CORE Institute's in-house Quality Department tracks all pioneered patient protocols to measure musculoskeletal outcomes and uphold patient care excellence.



Abstract

As the healthcare continuum continues to advance and evolve, key players at all levels are striving for better ways to serve the population. Cost of care is outpacing outcomes and predictable results are key. Finding cost-effective and efficient methods to gain more information in shorter amounts of time, and to utilize the ever-evolving technologies and applications of today are a key focus. Digital technologies and mobile-based applications provide adequate recovery results while having the power to substantially reduce cost of care and accessibility barriers.

Problem Statement

Total hip and knee replacements are considered safe and effective procedures to alleviate joint pain and improve quality of life ^(1,2). As the demographics of the United States have shifted to a higher percentage of older adults, the need for these procedures has increased.

Over the next decade, this growth will equate to an estimated 572,000 total hip replacements and 3.48 million knee replacements per year. With the increasing prevalence of these procedures, interest in strategies to improve postoperative outcomes and mitigate costs have grown.

Healthcare costs in the United States are projected to reach 19% of total GDP by 2027. The costs of healthcare are increasing at a rate of 3.5% year over year—a faster increase than many other goods and services.

Today, individuals aged 65 or older account for 16% of the US population. By 2030, 30% of all adults will be aged 65 and above ⁽⁶⁾. This will equate to Medicare enrollments going up from 57 million to an estimated 74+ million, underscoring the need to create more effective, efficient, and lower cost healthcare solutions for aging populations.

Aiming to provide even more accessible, efficient, and high-quality care to older adults facing musculoskeletal surgery, The CORE Institute partnered with PeerWell. To test the results of PeerWell's digital surgery optimization and recovery platform, PeerWell was given to a voluntary group of total hip and total knee replacement patients at The CORE Institute in Phoenix, Arizona.

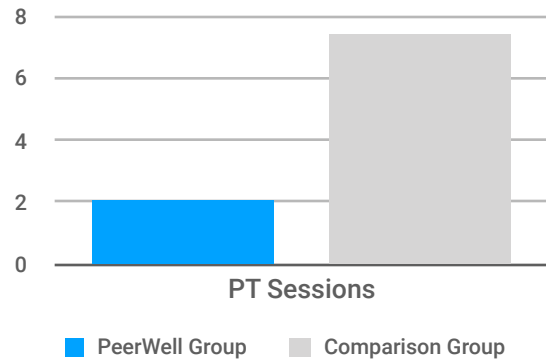
In 2014 more than one million lower extremity joint replacements were performed in the United States ⁽³⁾. By 2030, the volume of total hip replacements is estimated to grow by 174% ⁽⁴⁾ and knees replacements will increase by 673% ⁽⁵⁾.

Results

There were 24 patients in the PeerWell surgery optimization group. The PeerWell patients consisted of 10 total knee arthroscopy (TKA) patients and 14 total hip arthroscopy (THA) patients. The PeerWell group completed the entire "Hip and Knee Replacement PreHab and ReHab" program as directed. The average age of participants in this subject group was 71.26 years.

In the subject group (24 patients), there was a collective total of 49 outpatient physical therapy visits utilized throughout the entire episode of care.

The average number of outpatient physical therapy consultations (OP PT) per subject was just 2.04 visits. Comparatively, the average number of outpatient physical therapy visits per non-PeerWell patient is 7.4 visits per case.



The comparison group data is from a total of 1,643 THA and TKA cases from The CORE Institute that occurred in 2019. The total outpatient physical therapy visits in the non "PeerWell" group was 12,091, averaging 7.4 OP PT visits per case.

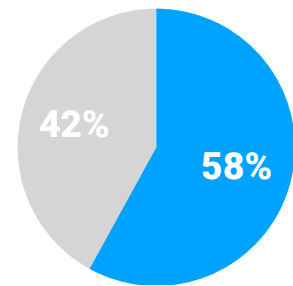
The data also showed that 58.3% of patients in the PeerWell sample group did not receive any outpatient physical therapy at all. Physical therapy is a requirement for all patients after a total hip or knee replacement surgery. The daily use of PeerWell's digital surgery optimization and recovery platform was able to completely eliminate the need for outpatient physical therapy in the majority of patients in the sample group.

For the PeerWell THA and TKA replacement patients that did accept in-person physical therapy, visits were reduced by 33%.

58.3% of PeerWell patients recovered from their TKA or THA without any in-person physical therapy.

PeerWell Patients opting out of OP PT

● No OP PT ● OP PT



PRO Data

The Hip Disability and Osteoarthritis Outcome Score (HOOS) and the Knee Injury and Osteoarthritis Score (KOOS) questionnaires were used in this trial to compare patient self-reported outcome changes. These questionnaires are intended to quantify the patient's opinion about their knee or hip and any associated problems, and to evaluate symptoms and functional limitations during their therapeutic process. The pre-op and post-op scoring for the PeerWell surgery optimized patient group (that had almost 73% less in-person physical therapy) showed similar average self-reported score changes to the control group.

	THA (HOOS)	TKA (KOOS)
PeerWell group PRO score changes pre to post-testing	24.54	11.23
Comparison group PRO score changes pre to post-testing	26.50	16.45

Conclusion

This sampling indicates a strong potential toward reduction of in-person post-operative physical therapy consultations (73% reduction). In addition, there were consistent patient-reported outcomes between both groups and substantial engagement of the mobile or desktop technology (36%). With the difficult-to-reach patient user group that averaged 71.26 years old, PeerWell's surgery optimization and recovery technology has achieved substantial results in lowering costs per case, improving accessibility of care, and maintaining standards of care.

References

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About PeerWell

PeerWell is a surgery optimization platform that helps patients and injured workers with musculoskeletal conditions prepare for surgery, or reduce chronic pain and improve mobility. PeerWell is an extension of the healthcare team and works to lower patient risk, control costs, reduce outpatient physical therapy, and speed-up return-to-work times. Leveraging the five pillars of health, PeerWell's daily digital program targets the whole person and the whole patient journey.