

# Improving Musculoskeletal Outcomes with Real-World Data

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## **ATI Physical Therapy**

Musculoskeletal (MSK) conditions such as low back, shoulder, and knee pain impact 50% of Americans annually, resulting in almost \$1 trillion in direct medical costs. Patients with MSK-related pain seek easy access to convenient care that will provide a clear plan to resolve their pain. Early access to physical therapy (PT) has demonstrated the ability to safely deliver, predictable improvement in patient function while avoiding opioids, imaging, and often surgery.[1-4] Research shows that patients receiving early PT (first 90 days after diagnosis) show marked reduction in pain and disability and incur less total cost of care in the next year compared to patients who do not receive early physical therapy.

ATI Physical Therapy delivers predictable outcomes by leveraging the ATI Patient Outcomes Registry with more than 2.5 million patient episodes integrated with the latest clinical practice guidelines[5-29]. Registry data has been used to develop robust risk-adjustment and stratification approaches that offer the most accurate view of patient and clinician factors associated with the best clinical outcomes, then combined with available published evidence to provide our ATI Best Practices (ABPs). These proprietary “ABPs” provide clinicians with specific guidelines that reduce variation in care and result in the optimal treatment mix and dose of care to drive the best patient outcomes.

## **ATI Patient Outcomes Registry**

ATI measures outcomes for every patient using validated, published outcomes benchmarked against the ATI Patient Outcomes Registry, a first-of-its kind musculoskeletal healthcare database that informs our unique evidence-based rehabilitation approach. The ATI Registry was created in 2014 with the primary goal to improve understanding of patient outcomes associated with rehabilitation for musculoskeletal injuries. Data from the ATI Registry generates actionable insights that improve patient outcomes and enable the delivery of high-value musculoskeletal care. These insights are developed using real-world data and enhanced by partnerships with leading healthcare thought leaders including the Duke Clinical Research Institute, University of South Carolina Center for Effectiveness Research in Orthopaedics, University of Colorado, and University of Southern California. Through these partnerships and collaboration with other scientists, research institutions and physicians, the ATI Registry seeks to enhance patient care by advancing clinical knowledge to drive best care practices. The ATI Registry is HIPAA-compliant, registered with ClinicalTrials.gov, listed in the

# *ATI Patient Outcomes Registry Comparison to Physical Therapy Industry Benchmarks*



Registry of Patient Registries, and vetted by the U.S. National Institutes of Health and the U.S. Department of Health and Human Services' Agency for Healthcare Research and Quality.

With its more than 2.5 million completed patient episodes, the Registry is the largest musculoskeletal database using the publicly available outcome tools recommended by the American Academy of Orthopaedic Surgeons and American Physical Therapy Association (APTA). The ATI Registry has also been accepted by the Center for Medicare Services Quality Payment Program. The state-of-the-art Registry is always evolving to allow for novel analyses of the musculoskeletal care we provide to better understand real-world effectiveness through data collected by ATI's proprietary electronic medical record system and is built into the patient experience and clinical workflow. Information related to referral source, patient demographics and health history, patient-reported outcomes, documented treatment, and patient satisfaction are collected in real time, then provided immediately to the clinician to guide care and archived in the ATI Registry for analysis.

Because of its size, the ATI Registry is leveraged to provide widely generalizable evidence that guides musculoskeletal care for our patients. This evidence fills significant knowledge gaps using real-world information outside of the traditional academic and hospital-based medical systems and informs best practices for musculoskeletal health management. This framework is well suited for advancement to an automated machine learning approach to drive personalized musculoskeletal medicine.

## **Risk-Adjusted Benchmarking to Improve Care**

Registry data has been leveraged to create industry-leading quality improvement by providing actionable insights to ATI therapists. Drs. Thigpen and Lutz have led efforts to leverage ATI's Patient Outcomes Registry to develop risk-adjustment approaches that predict patient improvement for musculoskeletal disorders based on findings at initial evaluation. Dr. Thigpen published the first risk-adjustment protocol for surgical patients undergoing rotator cuff repair in 2018.[30] Dr. Lutz published the first risk-adjustment process for non-surgical back and neck pain in 2020 using publicly available outcome measures.[31] These published methods are foundational to ATI leading the musculoskeletal healthcare industry in advancing patient-centered measures of clinical quality and offer the unique opportunity to be an industry leader in value-based healthcare delivery. Risk-adjusted outcomes are used in two ways, first to know the likely improvement expected for each patient, and second to evaluate the quality of care at a therapist level. In 2020, 67% of ATI patients met or exceeded the predicted outcome. This unmatched quality improvement process and therapy benchmarking is the foundation to delivering predictable outcomes for patients with MSK-related pain.

To learn more about working with ATI Physical Therapy, please visit:

<https://www.ATIpt.com/physicians>

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