

Non-Contact Injury Risk Reduction by >50% Utilizing Physimax Technology

Problem

Musculoskeletal (MSK) orthopedic overuse injuries are a major concern for any athlete, professional or recreational, as well as for the general population, affecting 1 of every 2 adults in the U.S.

Until now, MSK assessments require an expert, thus not scalable, difficult to objectively monitor and track progress or risk.



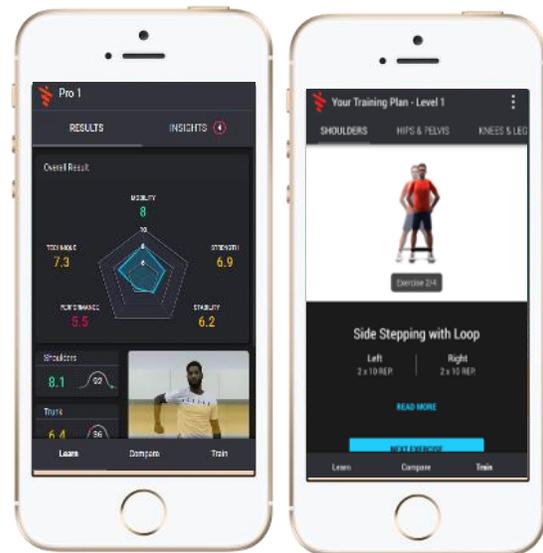
Goals:

- 1) Reduce injury risk
- 2) Measure and track progress objectively.
- 3) Demonstrate progress through an easy-to-understand format for athletes/patients

Implementation:

In 2018-19 season, we provided six of Physimax's US customers – four Professional sports teams, a U.S. military unit, and a recreational performance center at a Division I college with:

- 1) **Physimax kit for baseline + recurrent assessment** of LESS test (Landing Error Score System) which was found (source: ***) as predictive for lower extremity injuries.
- 2) Following assessment, each athlete was algorithmically assigned with a **Physimax 9-week exercise program** according to the athletes' unique impairments found by the system. The program was then adjusted by the PT/AT for best fit.
- 3) Each athlete/patient received a **mobile app** with all exercises available, including time for every exercise, # of repetitions, videos and instructions on how to perform each exercise correctly.



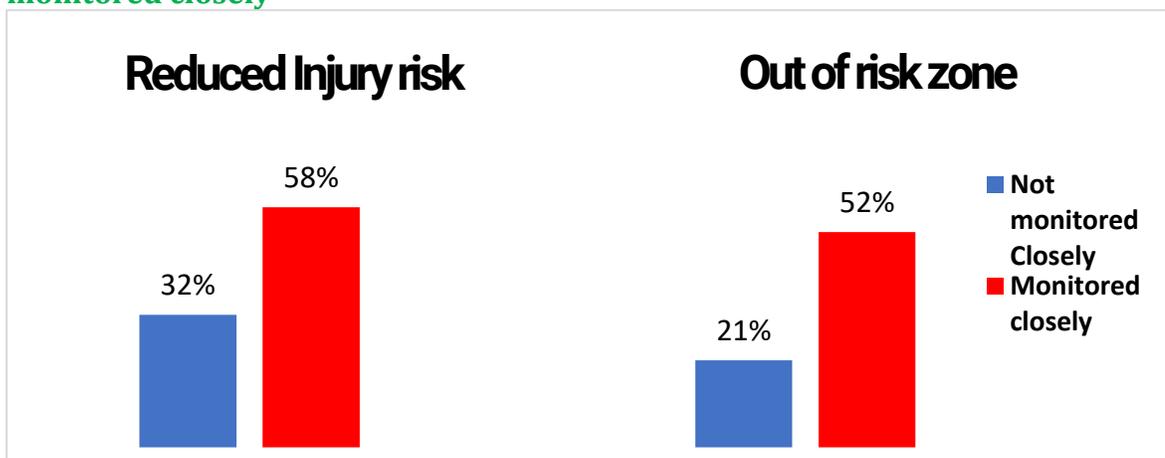
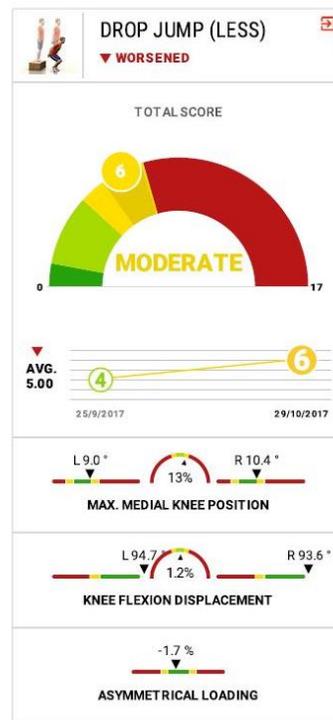
Following baseline assessment: Physimax index mapped the subjects to 3 categories of injury risk: High (red)/Moderate-low(yellow)/out of risk (Green)

After 9 weeks, we re-evaluated the subjects for 2 goals:

- **Objective personal changes in injury risk**
- **Comparing results of athletes who performed the program with close monitoring of PT/AT, to those who were not monitored closely.**

Results:

- 1) 60% of subjects performing Physimax exercise program reduced injury risk**
Moving from “poor” to “moderate”, “poor” to “good”, and from “moderate” to “good”
- 2) ~50% of subjects performing Physimax exercise program moved from being at risk to being “out of risk” category**
Moving from “poor”/ “moderate” to “good”
- 3) Athletes who were closely monitored while doing the program at home had significantly better results than those who were not monitored closely**



Conclusions: objectively measuring and tracking individuals’ musculoskeletal condition is crucial for injury prevention. Physimax’s recommended training programs were found successful in reducing injury risk among pro, collegiate, and recreational athletes. In addition, in places where the staff monitored execution closely – results were significantly better.

Athletic Trainers & Physical Therapists are able to easily integrate Physimax technology into their workflow, perform assessments easily, and most importantly – have a mobile tool to monitor their athletes/patients progress in order to create impact for their organization.

Want to utilize Physimax solution in your organization? Contact: info@pmax.co