

# ViPerform™

## INJURY PREVENTION CASE STUDY: Soccer program successes by instituting the AMI technology for injury prevention for their D1 Athletes

### The Subject

Justin Sampley, the Physical Therapist for Grand Canyon University (GCU), and Matthew Robinson, GCU's Athletic Trainer, utilize dorsaVi's Athletic Movement Index (AMI) module for the GCU D1 women's soccer team. They hoped to use this technology to create programs for their athletes to address potential issues before they lead to serious injury.

### ViPerform AMI Assessment

The AMI Module uses wearable sensor technology to create objective data and identify potential movement fault in athletes. The AMI is a screen test designed to assess healthy athletes, to help them stay healthy, and aid decisions for readiness for Return to Play for those rehabilitating from injury. The technology enables clinicians to detect faulty movement otherwise invisible to the naked eye. Thereby providing an opportunity to get the athlete on a program to address the issue before it leads to an injury. The key metrics of the AMI are core stability, single leg mechanics, and ankle dorsiflexion. These are measured through a mandatory set of seven research-based tests:

- Plank test
- Full squat test
- Side plank test (left/right)
- Single leg squat
- Single leg hop
- Single leg hop plant
- Ankle lunge test

### The Process

GCU's main purpose of using the AMI was to look at the quality of the athlete's movement, landing, and stability.

- The athletes were assessed, the trainers were then able to guide development of their programs by tailoring each to the specific needs of the athlete.

- They were then able to re-test their athletes with the AMI and evaluate the improvement.

### The Results

Matthew Robinson, the GCU trainer for the team, reported the following statistics after incorporating AMI testing into their program:

- ACL injuries decreased to 0 this year.
- Orthopaedic surgeries decreased from 10 in the prior year to 1 this year.
- Nearly all knee injuries were the result of contact.

### Conclusion

The AMI assessment proved to be an important addition to the GCU women's soccer team program. After incorporating the AMI, the team saw an obvious reduction in non-contact injury rates.

"The main benefit of using dorsaVi is that we can look into the quality of movement/landing/stability in a controlled environment. It helped guide development of the programs for each of the girls. This also allows us to re-evaluate each year and incorporate new exercises if needed. The ability to re-check testing throughout the course of the year is also helpful to monitor progress.

The reports make this very easy."

- **Matthew Robinson**

To learn more about ViPerform AMI visit <https://www.dorsavi.com/us/en/viperform/>

# GCU

