## President's Message



By Howard Osterman, DPM

## Recently the AAPSM was contacted by the Editor of Lower Extremity Review to provide a commentary on "What will be the biggest change in the marketplace and/or the field of a sports medicine practice" – my column this month is our submission to LER to celebrate their 10<sup>th</sup> Anniversary ....

The field of Sports Medicine has undergone exponential growth in the last few years, but it still remains in its infancy. So much research and technology have been instituted since the days of "RICE" Rest-Ice-Compression-Elevation. The catch phrase for some of this phenomenon is "analytics" and covers a variety of topics. This is where I believe Sports Medicine is going in the future. It really started with The Elias Sports Bureau in 1917, then Bill James' Historical Baseball Abstract in 1985, and led to Billy Beane's Moneyball and Nate Silver's company, FiveThirtyEight, which started in 2008. It began with crunching numbers to evaluate an athlete's competency, but has evolved into so much more, guiding conditioning strategies and nutrition. Everything is guantifiable now, but there is currently a glut of numbers. The numbers are impressive but often were just that, numbers. Slowly and systematically though, the numbers are beginning to show patterns, but often the information they yield are elusive in clinical application. Every large university and medical clinic, like Mayo, now has an analytics center. There is a market for the data and guite a bit of money in it. There is no shortage of private companies providing information as well. As the data accumulate, and the literature increases, conclusions will be formulated, and training/treatment regimens can be fostered. Podiatrists, orthopedists, physical therapists, athletic trainers, chiropractors, nutritionists and many other practitioners will be able to produce reliable models to increase performance and reduce injury risks.

Injury treatment and prediction have already improved using this these technologies and will continue to do so. Incorporating stem cells/platelet rich plasma, with shockwave, dry needling, cold lasers and antigravity and aqua treadmills has shortened recovery times and produced some miraculous sports recovery stories. Historically, regenerative medical clinics had been associated with nefarious intentions. They were frequently fronts for steroid shops and illegal performance enhancers. But here's the thing: their concoctions worked. Athletes were willing to risk long term potential health issues with the short-term performance gains. These clinicians and practices were shady but did spawn a budding business model. The medicine evolved and has become much more

mainstream. Physical Medicine and Rehabilitation (PM&R)/Regenerative medicine specialists have helped introduce new ideas and expectations for things like mesenchymal stem cells, hyaluronic acid and prolotherapy.

Returning an athlete to activity, at any level, often requires a collaborative effort. One of the biggest challenges to today's sports practitioners is the single sport young athlete. Often there is limited cross training as kids are groomed to compete, and drills in repetition do not allow a full complement of muscle growth. I think what will actually occur is that we will be able to use apps on cell phones or Apple watches to create training programs, using a program from a teaching institution or private lab that will be customizable for each patient. It may incorporate diet and exercise levels for everyone. I know much of this currently exists, but it is ready to explode exponentially. We, the premier sports medicine professionals, need to be ready for it.