

Clearing out the sidelines

As technology in sports medicine continues to advance, injured athletes are spending more time in the game and less time playing through the pain

It all boils down to playing time. Ask any athlete, coach, or athletic trainer to discuss the impact that technology has played in the realm of sports medicine over the last decade and the first thing they'll mention is overcoming an injury and getting back on the playing field as safely and quickly as possible.

This philosophy has always been pervasive in the world of sports medicine. But for the first time since the inception of a profession that pre-dates even Aristotle's "Animal Motion" treatise and today fuels entire television networks, the technology is finally catching up to the ideal. Advancements in physiology have deepened the understanding of the human body, allowing athletic trainers to treat and help athletes to overcome their injuries with speed and success rates unheard of even a decade ago.

"Any injury is a bad injury," said **Jim Winkler '98 BS, '00 MS**, head athletic trainer at NMU. "Our job as athletic trainers is to keep the sidelines as bare as possible and our athletes healthy and ready to compete whenever they are needed. The technology that allows us to begin treatment as quickly as possible is invaluable."

Wildcat hockey forward Chris Gobert of Marquette understands the value of quick rehabilitation. Gobert pulled his groin during the championship game of the University of Wisconsin Badger Showdown in late December 2002. He was consequently out for five

games—a significant portion of the Wildcats' 36-game season.

"Being injured is horrible," Gobert said. "Especially during your senior year. Having to watch the team play on the television while they were on the road was emotionally straining. Sometimes it felt like I wasn't even a part of the team anymore—they were all out practicing, and I was in the training room, hooked up to the stimulators.

"But at the same time, Jim Winkler and the athletic training staff were amazing. They told me what I had to do and helped me through a lot of tough afternoons. The technology is amazing, and it looks like it's only going to get better as time goes on."

Recovery didn't come so quickly for Shannon Boyer. The NMU women's basketball forward from Rapid River was sidelined for seven months after having knee surgery for a torn anterior cruciate ligament.

"I tore my ACL while driving in for a lay-up," Boyer said. "The

whole rehabilitation process was frustrating—all those little exercises they made me do seemed pointless at the time, but I know they really helped me now."

Like Gobert, Boyer knows that her recovery would not have been completely successful without the knowledge and expertise of the NMU athletic trainers.

"My trainers were awesome while I was going through physical therapy," she said. "They forced me to take my time, but they pushed me to work hard so that my knee could get better."

Winkler said that it's hard to pin down the most valuable advancement in sports medicine because the changes have been rapid in all areas of the field.

"I'd say that the use of computers to access student-athlete records, insurance forms, contact information, and other demographic information has been the most valuable aspect for me. We have injury tracking software installed on our laptops and PDA's that allows us to access a student-athlete's information whenever we need it, wherever we are. From the moment we get an injured player stabilized, we can jump onto the Internet and determine the extent of the injury and begin the rehabilitation process much faster than we've ever been able to before."

Winkler added, though, that improvements to technology have also gone a long way toward streamlining his job.

"Rehabilitation machines that were once huge, clunky objects are



now smaller and portable. We can now basically take all of our important machines on the road and use them on the bus or on the sidelines or in the hotel.”

For example, Winkler said that his most important machine is a portable electric stimulation/ultrasound machine that he can use to treat up to four players at once for a variety of injuries and ailments ranging from chronic tendonitis to acute strains and sprains.

NMU Head Hockey Coach **Walt Kyle '81 BS** has seen firsthand how the advancements in technology and knowledge have benefited both athletes and their teams.

“When I was playing hockey twenty years ago, a knee injury, for instance, could end a player’s season and possibly jeopardize his career,” said Kyle. “But now, a knee injury can be treated without surgery and the player can be back on the ice in a matter of weeks.”

Mike Oswald, NMU football defensive back from Hillman is also impressed with the way NMU athletic trainers stay on the leading edge of their field. Oswald suffered a bevy of painful injuries during his senior year: he shattered and dislocated his pinky finger; he then shattered his right thumb, which required metal pins to be inserted into his hand during surgery; and he suffered a contusion in his left leg that caused bruising from his thigh down to his foot.

“There is no way that I would have been able to play this season right from day one if the staff hadn’t



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been as helpful as they were,” Oswald said. “There isn’t anything that you need that they don’t have—whether it’s in the form of technology like the stimulators or in the wealth of information they have.”

But, as is almost always the case with increased access to information, sometimes the wealth of images and documents available creates a more difficult situation for Winkler and his staff.

“Injuries break a player’s ambitions really quickly,” Winkler said. “Each of them just wants to get out

there and play. Sometimes, athletes will come in for their therapy and demand a certain type of treatment because when they were at home the night before watching one of the sports networks, it was mentioned that some professional athlete has the same injury and is doing this one thing and is expected to play that weekend when we’ve told our athlete that he or she is going to be out for at least the next week, if not longer. While we want the athlete out there as much as possible, we also know that each of them still has the bulk of their lives ahead of them. It’s just not worth it to push for an unattainable goal.”

Despite this difficult aspect of working with some of the most goal-oriented students on the NMU campus, Winkler is still thankful that the information is available not only for the benefit of the athletic training staff, but also for the athletes and their parents.

“The injuries themselves and the process of overcoming them is still, at times, a delicate process that requires an immense amount of dedication by the injured athlete,” Winkler said. “But we’re no longer working and playing in those days when we walked injuries off and if you could still walk around after you had gotten hurt, you were good enough to play. Now we’re focused on the moment an injury happens and treating it for what it is. The long-term effects of this focus are immeasurable. It could, after all, save someone’s career.”

—**Ryan Sjöholm '99 BS**