Putting athletes ahead of the game
GP South teen's concussions spur his mom to advocacy

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Tim Shield was an eighth-grade ice hockey player the first time he took a hit to the head hard enough to make him forget what happened for several minutes afterward.
"I came to, and I was at the other end of the ice and didn't know how I got there," said Shield, now a 17-year-old junior at Grosse Pointe South High School, as he remembered the blast at the boards.

The next year, on the lacrosse field, Shield was involved in a head-on collision at midfield that knocked him out cold. The freshman student didn't think much about his temporary amnesia a year earlier.
"I was out for like 10 seconds, just laying there," he said.
A teammate's physician father "looked at my eyes and took me out of the game. That was a good decision," said Shield.
"I haven't changed the way I play," said Shield, who still takes to the ice and the lacrosse field as well as the less-risky golf course. "But now I'm careful to notice how I'm feeling if I get hit."
Along with his inquisitive, protective mother, Shield sought out an expert and now knows that memory loss and loss of consciousness caused by concussions are things to take very seriously.

Too often, some say, young athletes like Shield take the "shake it off" approach when it comes to head injuries.

That puts athletes -- especially younger ones whose still-maturing brains are slower to heal -- at risk for permanent damage for injuries that the U.S. surgeon general calls "a major health concern."

Tim's mom, Mickey Shield of Grosse Pointe Park, is hoping to change the tough-it-out way of thinking by spreading the word about a program that she, other parents and some experts in sports concussions see as one of the best ways to identify hard-to-diagnose concussions.

She is working with the Grosse Pointe South Booster Club and Athletic Director Brandon Slone to implement a Henry Ford Health System-based program called ImPACT in the community's high schools. Grosse Pointe South hockey players have already taken the initial test from ImPACT, or Immediate Post-concussion And Cognitive Testing.

Schools such as Cranbrook Academy and Detroit Country Day use the program as do Olympians, collegiate and professional athletes.
"We would like parents and schools everywhere to take a look at this," Mickey Shield said.

On Jan. 18 in the auditorium of Grosse Pointe South High School, Shield and other supporters tried to stir up interest in ImPACT by organizing a presentation by one of its creators, national concussion expert Dr. Kenneth Podell. Podell is director of the division of neuropsychology and the Sports Concussion Safety Program at Henry Ford Health System.

ImPACT is a software program that in 25-30 minutes measures cognitive functions for later comparison when a suspected concussion-causing injury occurs.
The program consists of three sections: a medical history, symptom reporting (current concussion symptoms) and cognitive testing that consists of eight interactive tests of memory, attention/concentration and reaction time. These are similar to video games and are interactive via a mouse or keyboard. It was developed by specialists at the University of Pittsburgh and Henry Ford Health System in Detroit, where Tim Shield went to see Podell, who also is a neuropsychological consultant for the Detroit Red Wings. Ideally, an online ImPACT test is given to athletes prior to the start of the sports season. That initial test obtains baseline data of an athlete's usual behaviors, memory patterns, reaction times and other cognitive functions. Should a head injury occur, the test is given again and used for comparison to make a diagnosis. ImPACT is seen as promising because of the inability of CAT scans and MRIs to diagnose concussions. Tests like it also are needed, Podell told the audience of 30-40 people, because the concussion guidelines that exist are "terrible," and there is virtually no standard protocol for treating concussions or post-concussion periods. Mickey Shield learned about ImPACT after a friend told her about it and only after visiting several doctors with her son, getting differing, sometimes wrong, opinions and deciding herself how to handle her son's concussions. Podell has found Tim Shield to be at no greater risk of concussion than any other athlete. "The test is so affordable and so accessible. There's really no reason for a kid in contact sports not to take it," Mickey Shield said. Via an online test that anyone can take, an ImPACT analysis costs $10. The tests are offered for $2 each under school contracts, which include setting up the software on campus and providing training to administer the tests as well as in on- and off-field diagnosis. Michael Dabbs, president of the Brain Injury Association of Michigan, which had representatives listening to Podell's Grosse Pointe South presentation, said a program like ImPACT "is a newer mechanism, perhaps more complete than anything we have. But it's certainly in such a developmental stage I think you're going to see significant change in 5 to 10 years."
"But it's a tool, and I'm in favor of any tool that helps get the message out."
With or without ImPACT, Dabbs said, "We want the coaches, the athletic trainers, the parents to be aware that a concussion is a form of a brain injury."
"I'm a father who has a son who played high school football and baseball, so I'm not out to see sports shut down. It's too important a part of our lives."
"From our point of view, the athletes, the coaches, the trainers, the parents need to say it's all right to sit out a game or even a week of practice. ... The worst thing they can do is sustain a second injury on top of the first."
Podell, whose motto is "When in doubt sit them out," says to err on the side of caution.
"Rest, rest, rest is the best thing you can do for a concussed athlete. Sleep is good," Podell said. "The bottom, bottom line is it's better to be safe than sorry."

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