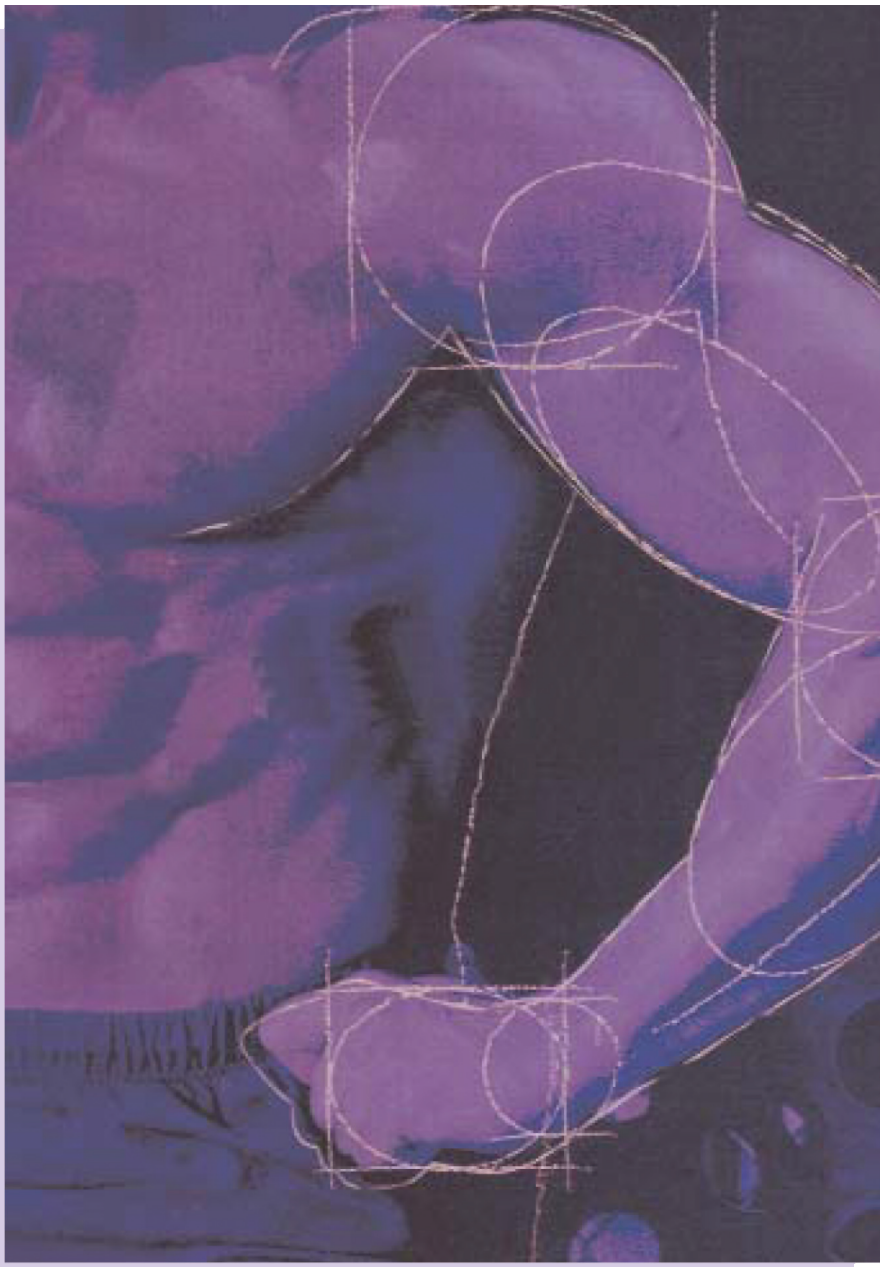

The Sports Medicine Model of Care for Your Occupational Athlete

Did you ever wonder how an elite athlete can sustain a severe knee injury and return to competition so quickly? If you said elite athletes train everyday, are in exceptional physical condition and have their own personal staff of medical professionals that will tend to every need, you are absolutely correct. After answering this question you might want to ask me a question. What does this have to do with risk management issues within my organization? I'm glad you asked.

During the past 40 years the orthopedic subspecialty of 'Sports Medicine' has pioneered many advances in technology and medical protocol that has allowed for more efficient and safer forms of treatment for all patients, not just the elite athlete. The first arthroscope was invented in the early 1900s as a diagnostic tool for orthopedic surgeons. During the 1960s arthroscopy was being refined by orthopedists who worked with athletic teams as a means to prevent career ending injuries. And arthroscopic procedures today are one of the most commonly performed procedures on people of all ages, body types, and activity levels.

While there are many treatment techniques and technological breakthroughs in medicine that come as a direct result of athletic health care, one component has stayed the same, the quality of care that results from the sports medicine approach. From the 1950s through the 1970s, the sports medicine model of care only encompassed the treatment of minor injuries on the sidelines and in locker rooms.

BY JIM ALLIVATO, ATC/L

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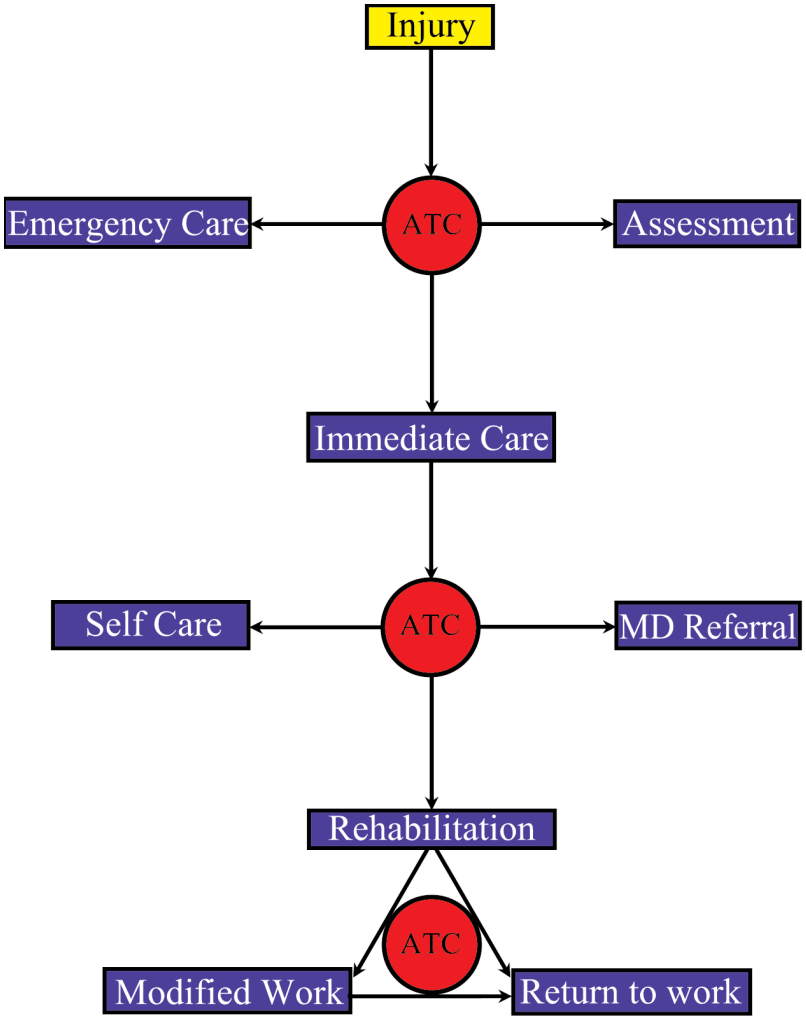
How does it work?



The flow chart exhibits the manner in which an injured worker is cared for and the process involved in returning an employee to work.

Today, a well researched part of the healthcare delivery system thrives in modern clinical settings found in high schools, colleges, professional leagues, and believe it or not, the workplaces of many public and private organizations across the country. Terms such as worker athlete, industrial athlete and occupational athlete appear in medical journals for physicians and many other allied health professionals.

While the objective of any sports medicine program remains the immediate, accurate and appropriate medical care of those injured in physical activity, it is the end result that has caught the eye of every CEO and CFO, which is the significant reduction of workers' compensation costs and improved employee productivity. As government budgets continue to dwindle, mayors, village presidents and governors look for ways to cut deficits, and implementing occupational healthcare programs require minimal investment with a substantial return.

Merriam-Webster Dictionary defines the word 'athlete' as a person who is trained or skilled in exercises, sports, games, or activities requiring physical strength, agility or stamina. Your employees are athletes in their own right. They perform repetitive and sometimes vigorous activities, which lead to accidents and injuries. The anatomy of a baseball player who throws 120 pitches in a game is no different than a person working on a manufacturing line who reaches overhead eight hours per day. The mechanisms of most injuries are the same or similar, both types of athletes can be trained, and if they get injured both athletes require prompt, comprehensive and up to date medical care. Why wouldn't you use the best possible care available for your employees? The workforce is the most important part of your inventory and when they are off work it costs money.

Who are the members of the 'Sports Medicine Team'?

In athletics, the team consists of a certified athletic trainer (ATC), team physician, coach and the athlete. The certified athletic trainer is an allied healthcare professional who is an expert in the prevention, assessment, treatment and rehabilitation of musculoskeletal injuries. They work in conjunction with physicians and understand the need for athletes to return to their respective activity as quickly and safely as possible. They are the ideal healthcare practitioners to care for athletes at any level.

The team physician in the occupational setting is termed the corporate physician who may be an internist, a general practitioner, an orthopedic surgeon or a physical medicine and rehabilitation specialist (PMR). In our programs we use PMR physicians because of their expertise in restoring function without the use of surgical intervention.

The supervisor or manager parallels the coach in our sports medicine teams. The supervisor helps to convey the components of the injured worker's job task to the medical practitioners so that future injury will be prevented and modified or light duty programs will be utilized. The supervisor's role as the coach in a sports medicine team is paramount.

Using the wrong intervention for the workforce is one of the most common mistakes organizations make when trying to get a handle on their workers' compensation costs.

The supervisor becomes an advocate for the employee rather than a nemesis in return to work issues.

In my experience, the percentage of malingerers is very low and the majority of injured workers want to return to work quickly in order to receive their full paycheck and return to their duties. In 1996, California's Department of Insurance concluded that suspected worker fraud was 0.3 percent.

The article, "Costs of Occupational Injuries and Illnesses" by independent researchers estimated fraud nationally as two percent of Workers' Compensation dollars. (1)Fraud is not a significant problem of the workers' compensation system. Entities that possess the attitude of anyone who becomes injured is lying do nothing for the morale of the workplace and often see an increase in the average number of days it takes to resolve a claim.

More importantly, any injured person has a better chance of a quick return to work and will respond better to treatment if they are educated about their diagnosis and prognosis and are included in the treatment plan set forth by sports medicine team. Organizations must do a better job of being involved in the care of injured employees.

The certified athletic trainer (ATC) is really the gatekeeper in the sports medicine model of care. In automotive manufacturing plants, trucking depots and large office complexes the ATC is the first responder to an injury. The injured worker will come to the medical center or other designated facility and is seen immediately for assessment of their injury or condition. From that point, the ATC makes the determination if the injured worker needs to be referred to the emergency room or a physician.

The ATC's scope of practice also allows for the designation of injuries needing only self-care by the employee and follow up with the ATC. That practice in itself can save $1,000 per incident according to the latest estimates of emergency room costs by NIOSH.(2) In our programs, if a physician determines that an injury needs formal rehabilitation the employee will receive this care on-premise, again saving an average of $140-200 per visit that is charged by most outpatient rehabilitation centers. Aside from the cost benefit, you will establish relationships between the ATC, physician, supervisor and the injured worker, which is immeasurable when revising job descriptions, reviewing employee compliance issues, returning the employee to modified or full duty work in a timely manner and, gaining the trust of the employee.

Sports medicine principles in occupational healthcare.

Why are the safety and health initiatives you have used or are currently using failing to decrease your medical costs? There are many components of sports medical care and each one may be applied in many different ways.

Using the wrong intervention for the workforce is one of the most common mistakes organizations make when trying to get a handle on their workers' compensation costs. Utilizing healthcare practitioners who have a thorough understanding of the etiology, or, cause and origin of injury, will enable the customization of solutions that will ultimately prevent further occurrences. The following is a description of programs as they relate to the occupational setting. These programs can be applied to all departments of government including streets and sanitation, corrections, fleet, public transit, and the office setting.

• Prevention/Education—There is never enough you can say about prevention. If the insurance industry had changed their focus to include paying for preventative services as they are beginning to now, we wouldn't be experiencing the double-digit increases in premiums each year. In the occupational setting it just isn't enough to have a health fair or a healthcare practitioner come to your facility one or two times per year. Prevention and employee education programs must be well thought out. They must take into account the characteristics of the workforce, the different types of job tasks and a thorough breakdown of the mechanisms of all injuries that occur in each group. Lifting and twisting injuries of the back are extremely different in the structures they affect and the subsequent treatment prescribed. If we tried to use the same training and injury prevention programs for both baseball and football players, we would find that at least one of the groups would see minimal benefits in their prevention initiatives.

• Fitness/Wellness—The corporate wellness programs of the 1980s failed for two reasons. First, the programs were classified as an employee benefit and utilized as such. No thought was put to the fact that the 20 percent of the workforce that had already participated in regular exercise were the only employees who would use these facilities. Secondly, there

was no relationship between the care for injured employees and the corporate wellness program. In our programs we combine the fitness/wellness centers with behavior change, nutrition education, motivational programs and medical management solutions. In this combined setting we have created a corporate health center that the employee embraces as a resource for their personal health. Our challenge is to get the sedentary, overweight and often sick employees, who usually account for 80 percent of your medical costs, into the wellness program. If we can turn five of these employees into regular exercisers and help them become more educated about the consequences of their health choices and ultimately healthier people, we can save an entity thousands of dollars in medical costs each year.

Lifting techniques cannot be taught with video instruction alone. They must take into account the job task and body type of the worker. Hands on training insures employee compliance while giving the worker confidence and trust in their company's health and safety programs.

• Early Intervention/Immediate Care—The foundation of any sports medicine program is the ability to provide immediate care and early intervention for all injuries or conditions an occupational athlete may experience. Research studies have shown the ability to apply ice, compression and elevation to an injury within the first few hours will cut healing time by 33 percent. Access to the certified athletic trainer on the premises automatically decreases the severity of most injuries and sets the stage for accurate diagnosis and continuity of care. Both of which are the cornerstones of quality and cost effective healthcare.

• Biomechanics or Ergonomics—The OSHA standard, which scared every corporation for the better part of two years and was ultimately repealed, introduced some of you to the term ergonomics. Ergonomics is the application of scientific information concerning humans to the design of objects, systems and environment for human use. Ergonomics comes into everything that involves people. Work systems, sports and leisure, health and safety should all embody ergonomicsprinciples if well designed. Biomechanics is the study of an object (in this case the human body) in motion with respect to the forces that can affect the object both positively and negatively. Ergonomic programs should consist of a biomechanical analysis for each worksite that considers postural alignment, body mechanics, optimum productivity and efficiency. After risk factors contributing to cumulative trauma are identified, low cost and easy to implement solutions should be used in order to decrease the incidence of cumulative trauma disorders.

• On-Premise Rehabilitation—The rehabilitation of musculoskeletal injuries both acute and chronic is the means to restore function. On-premise is the key in occupational healthcare. The nature of the rehabilitation is basically the same, however, the advantage lies in the ability to provide the service at your facility limiting lost time for travel to and from the workplace, keeping the injured employee involved as much as they can with limited or light duty programs, and eliminating the fees associated with such care.

• Functional or Work Specific Training—The reason why injured employees do not return to work or reinjure themselves when they do return is the absence of a supervised work-simulation program. Functional training should be the final phase of the employee's rehabilitation. If a basketball player who has been out for more than three months tries to return to the team without performing activities such as running, jumping, kicking, they almost certainly will be reinjured or be unable to perform to their pre-participation level. The occupational athlete must be treated in the same manner or the potential for closing the original claim will be significantly diminished. The injured employee returns to full duty quicker by performing exercise-based work-simulation. A typical scenario will involve four hours of work-simulation and four hours of light duty work in their specific job if at all possible. It is much easier for an injured employee to fall through the cracks when they are off work and attend rehabilitation sessions at a hospital or outpatient facility. They have minimal contact with their supervisor, their clinicians and fellow employees that can turn shoulder tendonitis into a 6-month hiatus from work.

We have talked a great deal about the components and the process involved in the sports medicine model of care for the occupational athlete. What are the benefits from using this approach to occupational healthcare?

• Improved employee morale and labor relations—As many companies reduce the benefits they offer to employees today, these types of healthcare programs will allow employers to improve their stance with labor groups and ultimately retain and recruit top level employees.

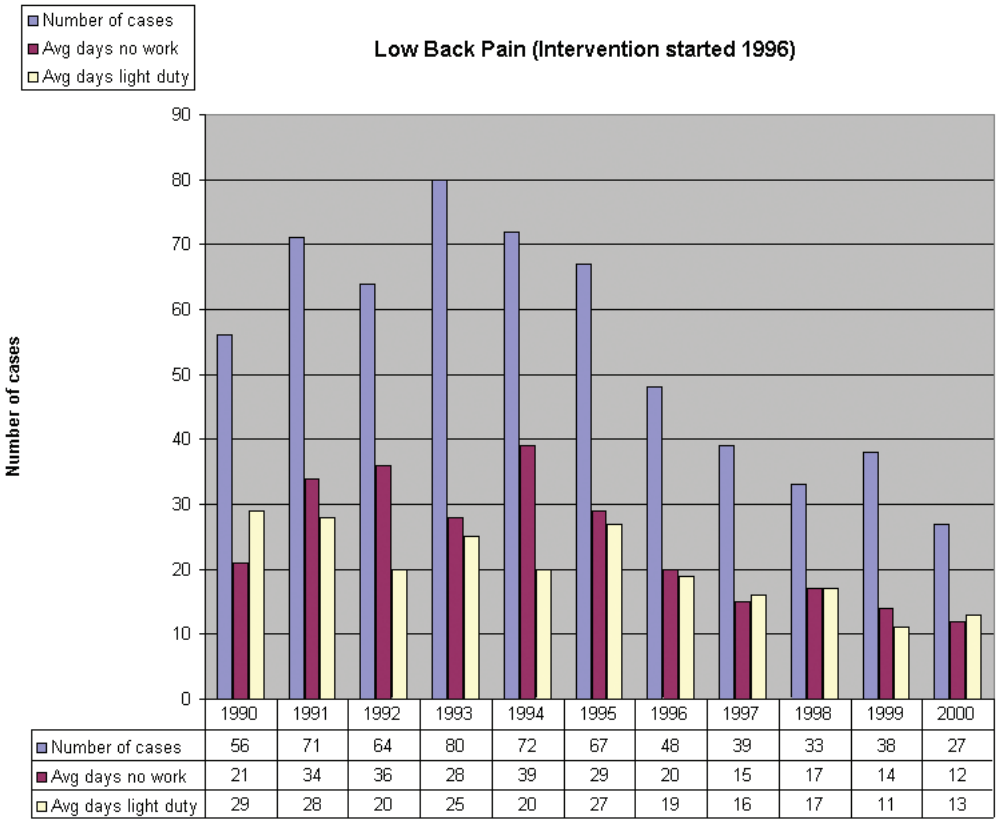
• Increased productivity and bottom line—A healthy employee is a more productive employee. Fewer lost days equate to decreased costs and increased budgets for other important projects.

• Decreased incidence and severity of injury—The earliest sign of the success of on-premise medical management solutions is a decline in incidence and severity of work-related injuries. (GRAPH 1) Sidebar—The graph exhibits the number of low back claims, related lost days and light duty days. Notice the trend downwards after 1996, the year on-premise intervention began.

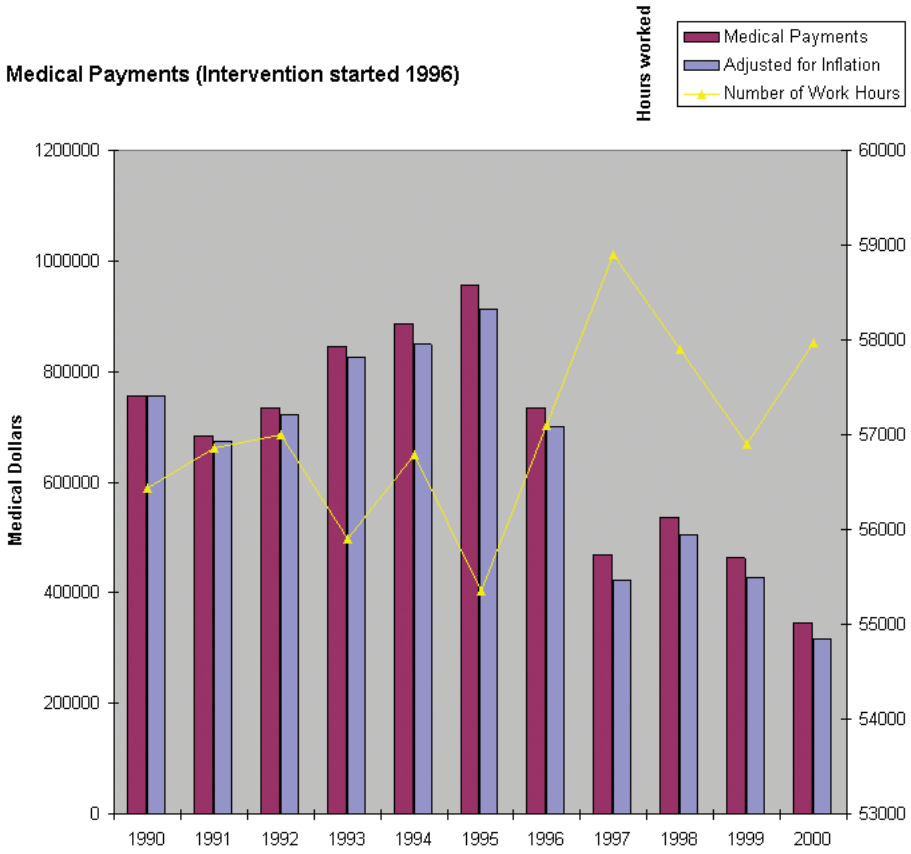
• Significant decrease in workers' compensation costs—On-premise care eliminates costs associated with emergency room and physician visits, outpatient rehabilitation visits, nurse case management fees, attorney's fees, total and partial-time disability, settlements, and replacement/retraining costs. (GRAPH 2) Sidebar--The graph depicts the cost of all medical payments for a 10-year period with adjustments for inflation. Notice the significant decrease in costs after 1996, the year on-premise intervention began.

• Quality of Care—The idea of capitated fee structures and limitations on availability of medical care has done little to decrease the overall price tag on healthcare; if anything it has caused fees to skyrocket. Along with these cost factors the quality of medical care has declined due to clinician decision making that is driven by the dollar. The 'Sports Medicine Model' of care is predicated on prevention, early intervention, accurate diagnosis, researched based rehabilitation, and functional activity simulation, which restores employee health, productivity and an agency's fiscal responsibility.

Promoting changes in the delivery of healthcare services for your employees is dependent on the ability for organizations and agencies to believe in the potential outcomes and convey the message to department heads and other key figures. An entity must embrace the program with a sense of ownership that conveys the cost benefit to its leaders, as well as the quality of health and life it will help their workforce achieve. •



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Number of cases	56	71	64	80	72	67	48	39	33	38	27
Avg days no work	21	34	36	28	39	29	20	15	17	14	12
Avg days light duty	29	28	20	25	20	27	19	16	17	11	13



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