Commentary: What Is Sports Medicine?

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To the question “What is psychology,” Dean Carl E. Seashore of the State University of Iowa once answered, “Anything that interests the psychologist.” A similar answer might be given to the question of “What is sports medicine?” It is “anything that relates to sports or physical welfare that interests those who are interested in sports medicine.”¹ By 2004 there was still no consensus in the United Kingdom (nor in many other countries) amongst sports medicine practitioners what actually constituted a sports medicine specialist.²

One of the most significant developments in sport over the last several decades has been the expanding power of medical knowledge in the production and regulation of sporting bodies. This forum explores some of the ways in which sporting bodies became the properties of science and medicine with a focus upon the institutional development of sport medicine as an acknowledged medical specialty and the allied health professions that have become attached to it. Given that the stress placed on athletes’ bodies during training and performance so obviously leaves them vulnerable to illness and suboptimal levels of health, we should not be surprised that partnerships between athletes and physicians began to develop in various contexts to understand the sporting body and maintain and improve athletes’ health and performance. The papers in this forum underscore this reality while demonstrating how context, perspective, and different levels of analysis

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shape our understandings of institutional and professional developments around the needs of the sporting body.

In “Not Taking the Medicine: Sportsmen and Doctors in Late Nineteenth-Century Britain,” Mike Cronin points out that historians of medicine have shown little interest in sport and its relation to medicine, but then this very much depends on what you call sport medicine “which has developed gradually, though sporadically over the last 2500 years”—if not longer. Given that historians of medicine traditionally focused narrowly upon well known medical institutions, medical discoveries, and the role of famous, mostly male pioneers in introducing new medical insights to a modernizing society this is no surprise. Furthermore there was a feeling that a “proper” medical history was concerned only with the distant past—with subjects such as Galen, Hippocrates, the Black Death, William Harvey and so on. “The notion that 20th century medicine, up to and including the last few years, was a proper subject for historical research would have been suspect.” So too would have been histories of medicine written by those without a medical qualification. It is only in the last few decades that broad areas of popular culture such as sport, in addition to physical culture, health, hygiene, diet, physical activity, drugs, and body modification have all come to be considered appropriate topics of study for academic historians and researchers. In some respects, sports historians have been leaders in this area for they have heeded health promoters by not viewing medicine, health, sport and other forms of human movement as incompatible subjects of study. Cronin approaches the subject more as a traditional historian of medicine might—focusing on institutional and professional arrangements of physicians—and views sport in much the same institutional way. This then allows him to differentiate between physical educators and allied health professionals’ involvement in providing health-enhancing physical activity and recreation versus physicians who traditionally provided primary care to the sick stranger.

In fact, physical educators and physicians have, in various contexts and at various moments in professional development and control been both the same people and at odds with each other. Their relationship to sport and physical activity and its consequences has been equally complex as Alison Wrynn points out in her analysis of athletic training in the United States. That is the big problem with erecting categories and tracing institutional developments around the sporting body. Just what exactly is sports medicine and what actually constitutes a sports medicine specialist? Influential physical educator Charles McCloy had a go trying to define them in the 1950s and came to the conclusion that to define sports medicine in a paragraph would be totally inadequate. I have read and analyzed three bibliographies of sports medicine and a curriculum of a school of sports medicine and have isolated 17 fields that pertain to the problems of sports medicine. Many of them are inter-related, and I have listed under each field illustrative problem areas. . . . [T]his is not an attempt to be exhaustive.

A more useful way to understand sports medicine developments might be to ask at what moment did “sport specific” injuries become viewed as the province of the specialty of sports medicine and to explore what exactly is a “sport specific” injury? In the United States, nineteenth-century physicians such as J. Harvey Kellogg sought health giving therapies for health and wellness through diet and physical activity along with treatments for dyspepsia, obesity, spinal misalignment, and all manner of displacements from various forms of physical activity (including sport) where in no way could one separate hygiene,
illness prevention, and health promotion for everyday people from practices treating sport and recreation related injuries and therapies for their recuperation. The growing interest in gymnastic exercise for therapeutic reasons during the nineteenth century has been well documented by sport historians, and Wrynn shows that Swedish gymnastics in particular had a strong influence upon the development of athletic training in America. In Britain, the striking growth of sporting activities in the second half of the nineteenth century led to the idea that sport was part of the business of life, not just a respite from it, hence the sporting body was increasingly viewed as in need of care through training and health advice. Looking at sport in England in the 1870s, French historian Hippolyte Taine declared, “There are . . . gentlemen in this country whose ambition and regimen are those of the Greek athlete. . . . They adopt a special diet . . . and follow a careful system of training.” Rowing, especially, which led this sporting renaissance, was seen to require medical support for training regimens of diet and exercise even while football (by virtue of its working-class origins and lack of respectability) was still seen as not dignifying such attention. On the other hand, as Roberta Park cautions, traditional views of the body continued to vie with newer understandings of the functioning of the athlete’s body well into the twentieth century.

In some respects, then, while there is ample evidence of medical authorities realizing that the sporting body required certain kinds of training and care, there is a problem in attempting to locate a sub-discipline of sport medicine in the nineteenth century before medicine had sufficiently developed its professional power or articulated and organized particular specialties around a number of areas of emerging scientific interest, including aging (geriatrics), children (pediatrics), infectious diseases and so on. Development occurred at a different pace in different contexts. In Germany, for example, scientifically-based sports medicine emerged much earlier than elsewhere. It became a specialty within mainstream medicine in the early decades of the twentieth century, with its own sports medicine journal founded in 1924 by the German Association of Physicians for the Promotion of Physical Culture. This was despite the fact, as John Hoberman has argued, that it developed within a conservative medical subculture that initially resisted the advent of sport. Rather it began as a study of the human organism under stress, and only later came to show interest in scientifically-based training in sport.

The real key to broad institutional development in incipient sport medicine, as Cronin appropriately points out, is when athletes themselves realized the utility of, and desired to consume a branch of medicine that they perceived would be useful to them in their competitive sporting endeavors. This consumption, of course, that arose from the conjuncture between the processes of medicalization and the increasing competitiveness of sport began when scientific knowledge and marketing expertise led to more specific services to consume, and athletes had the resources with which to consume them. So in the second half of the twentieth century we see the increasing development of knowledge areas related to sports medicine such as sports nutrition, orthopedic surgery, cardiac rehabilitation, early forms of imaging and so on, along with medicine’s urgent and growing need to broaden its scope and market from a focus upon sickness and injury to the care of everybody, including the well. It was well into the late 1960s, when the public began to realize that medicine was no longer the magic bullet to cure disease and restore people to health, that the medical profession began to move aggressively to take over the growing and potentially lucrative
health prevention and health promotion market—extending its power within an increasingly medicalized society. Why wait till people fell sick or injured? As a concerned, albeit conservative, British Minister of Health Enoch Powell pointed out, “[T]here is virtually no limit to the amount of health care an individual is capable of absorbing.”

Sport medicine came to play an ever expanding role in demonstrating to the public medicine's utility in fixing up the bodies of the emerging fitness generation, extending the “shelf life” of the active aging population, and supporting the growing medical demands and body enhancement desires of everyday runners as well as professional athletes. At the sports medicine clinic one could get a running injury taken care of while signing up for medically-supervised training for the next marathon—an excellent way to keep a lucrative business lubricated.

So while one can generally agree with Cronin's attempt to demarcate three phases of sports medicine in twentieth century Britain there are cautions. It is clear that in the first phase in the late nineteenth and early twentieth century, allopathic medicine largely focused on advice about the dangers of sport rather than on keeping sportsmen sporting. We have wonderful examples of the perceived problem of “athlete's heart,” the dangers of over-exertion and drinking water during activity and so on here. Medical advice (or rather warnings) to male marathon runners and rowers, for example, focused on the dangers of exertion and hypertrophy of the heart and exhorted men to reduce their efforts. In 1867, British surgeon F.C. Skey told the Times that “even if they were not immediately apparent, calamities with over-exertion in athletic sports were likely to appear in later life.”

According to James Whorton, “[A]sylums and hospitals were said to be crowded as a result of athletic excesses.” Permanent injury or even death was viewed as a possible consequence of all kinds of vigorous exercise and sport, and doctors were brought in to supervise marathons and rowing events and to measure and document the perceived ill effects upon the body. The desire here, as Hoberman and others have pointed out, was still to study the bodies of male athletes, not so much with a particular interest in sport or in enhancing sporting performance as in order to understand the biological wonders presented by the high performance athlete. How far athletes acted on these medical warnings, states Cronin, is difficult to establish, and in any case, it was only a particular segment of educated sportsmen in Britain who tended to be watched for evidence of sports-related trauma.

In Cronin's second category, 1920s to 1950s, medicine continued to offer advice to sportsmen while athletes tended to resist rather than embrace it—a sort of non-engagement if you like. Cronin explains it in terms of class, but the explanation is more complex than simply the difference in outlook between manly sportsmen who accepted pain and injury as part of everyday life and the gentleman doctors (i.e. manliness versus gentlemanliness). The notion that working-class competitive sportsmen expected pain and injury as a matter of course and bore it as proof of manliness rather than seeking out medical advice simply tells us what we know about gender, class, and medical care in general—that those who cannot afford it go without and that women typically seek out and comply with medical care more than men. Furthermore, while it is clear that gentleman athletes of this period largely resisted regular medical advice about the perceived dangers of sport and continued their activities of choice, we should remember that they were quite ready to press women to conform to the same medical advice they avoided for themselves. The medical debate around an athlete's heart found no reason to fixate upon
the female heart, and while men ran and played in spite of medical cautions, women were slowed to a walk because of them. Thus resistance to medical cautions was very one-sided, as was the development of competitive sport. While men in Britain may have gone about their sport, in the words of Sir Stanley Rous, “in a surprisingly unserious way,” they were not unserious about their resistance to women joining them on the playing field or about using medical injunctions to invalidate them.

Thirdly, the post 1950s saw the increasing selling power of sports medicine to improve performance regardless of health and increasingly of class and gender. Athletes began to seek out sports medicine to enhance their performance, and training and accreditation became increasingly articulated. This is where much of the current writing on sport medicine is located—in the realm of risk. As Nancy Theberge points out in “It’s Not about Health, It’s about Performance: Sport Medicine, Health and the Culture of Risk in Canadian Sport,” athletes are now understood to require routine medical supervision, not because they have a clearly defined pathology but simply because they are athletes. Parissa Safai does not disagree, but moderates this argument to show that while the culture of risk is today a defining feature of the negotiations between athletes and sport medicine practitioners, it has been countered by a culture of precaution that resists the acceptance of pain and injury in sport in its attention to the health and safety of athletes. Indeed, she proposes, the dialectic between the cultures of risk and precaution now provides the main context in which increasingly complex negotiations between athletes and medical practitioners occur.

One can document this developmental sequence from the 1950s in much broader terms. Rising nationalism in the Cold War era of the 1950s and beyond placed a much greater emphasis on performance in sport as a way to foster national pride leading to greater material rewards from sporting excellence. This was when sport medicine blossomed to become more directly involved with dealing with sport specific injuries and improving performance and was increasingly institutionalized, hence the development of the British Association of Sports and Exercise Medicine (1953), the American College of Sports Medicine (1954) and later the Canadian Academy for Sport Medicine in 1970, as well as the recognition of sport medicine by national and international sporting bodies such as the International Olympic Committee (IOC)—the topic of Sarah Teetzel’s article in this forum.

In the United Kingdom, class, of course, is all, and Cronin’s section on the training and medical support needs of different kinds of sportsmen makes sense. Who could consume specialty medicine? Those who could pay for it and had access to it. Increasingly as sport professionalizes, so too does medical care specialize to complement the process. Owners of sports teams know how important it is to protect their business assets for the next paying sport performance and that it makes good fiscal sense to extend the career of your players to keep them at the top of their game for as long as they are making money, regardless of the long term price paid with broken bodies. It is not, perhaps, such a good idea for sports medicine doctors to enter the drug performance- and genetic-enhancing game, though protests from the World Anti-Doping Agency point up continuing problems in that area. As Dr. Alain Garnier, medical director of the agency stated recently:

Following recent declarations of certain doctors who consider that doping is necessary and even healthy for athletes, it is time to reaffirm, once again and
without equivocation, some very basic principles in medical practice and deontology. . . . Always and without exception, a medical doctor should follow the principles of medical practice and defend the health of the athlete, independent of the level of competition or the potential economic consequences. . . . In turn, sport organizations should always ensure this right to physicians, guaranteeing physicians independence in their medical decisions. . . . Can one imagine a wider inequity in this world than that of scientific knowledge and availability of medicines? . . . It would mean the end of merit for athletes.  

This is an area of ethical concern for Teetzel who focuses on the Canadian experience in order to show how differential medical services provided to national Olympic teams and by Olympic host cities have introduced additional inequalities into the Olympic movement. Canada was late to the game. She points to early interest in sport medicine for Olympic athletes by German physicians who first organized a sports medicine congress at the 1912 winter Olympics in St. Moritz. By the time of the 1936 congress in Berlin they were attracting over 300 German physicians and an additional 400 doctors from more than thirty-five countries. Teetzel attributes the slow but growing postwar enthusiasm of North American (and probably British physicians too) for sports medicine to cold war rivalry focusing on interest in the achievements of Olympic athletes and the reasons for these achievements (e.g., drug and altitude effects and new scientific training methods) leading to newly perceived needs and the consequent growing power and respectability of sports medicine specialties. 

Not surprisingly, the problem of inequalities continues because despite free and accessible medical services offered by host cities some national teams are now accompanied by an ever growing group of medical personnel (a situation which has diverted host city medical teams to look after spectators and athletes from poor countries while others bring in their own increasingly sophisticated specialists). Canada, for example, currently sends more medical personnel to the Olympic games than the number of athletes listed on many countries’ rosters, posing an interesting ethical dilemma around the nature of athlete support and one that the IOC attempts to control by constantly making new rules about allowable medical support. At least one of the more positive aspects of this development was the exchange of chaperones for female Olympic athletes after the 1970s with medical personnel to cater to their health and medical needs rather than their comportment and appearance. On the negative side has been the enthusiasm to use medical personnel for sex tests, and other dubious interventions. And despite (or is it because of) increasingly sophisticated medical personnel and attention to enhancing athletic performance we still see cyclists dying from doping, young gymnasts competing with broken, frozen, and strapped up body parts or trapped in anorexic bodies, and boxers and body builders flaunting steroid induced hyper-mesomorphic bodies. As Nancy Theberge has illustrated in her conversations with sports medicine personnel in Canada about their work with top elite athletes:

This is all about performance. This is not about health. These are not healthy people that we are sending to Barcelona or wherever. . . . These people . . . get sick more often, they get injured more often; they get depressed more often. . . . Now does that mean we sacrifice people to the point where they’re destroyed? We kill them? Or that they are crippled for the rest of their life? In some cases yes, but in most cases no. There is a balance that needs to play.
Neil Carter focuses on broad-based medical care for professional soccer in Britain as a case study, elaborating on Cronin’s suggestion that attitudes toward amateurism and professionalism had a significant impact on the early development of sport medicine practices. He traces how professional sporting competition, which inherently promotes the values of excess, has increasingly consumed medical care to guard its assets. He points out that the British Medical Association was not disinterested in the sporting body even in its early decades but confirms Cronin’s arguments, based on Norbert Elias’ theories around the civilizing process, that while medicine advised about the dangers of sport it focused more on the conduct of the game than on keeping sportsmen sporting. We could call this era the band-aid years when physicians warned against potential problems and patched up injuries but paid relatively little attention to excellent work in pioneering sports medicine being done in Germany and other parts of Europe. British sports medicine (if one accepts the definitions provided that exclude advice to the general population around health and fitness) lagged behind others throughout most of the twentieth century, and it was not until the last decades that a discernible specialty was institutionalized. This, Carter claims, echoing Cronin’s emphasis on the effects of amateurism, is because sports medicine development in Britain largely mirrored the professionalization trajectory of soccer and the slow acceptance by clubs of the obligation to care for and control player’s injuries. Class again rears its head here for professional players in England have traditionally come from the working class, rendering the care of their bodies less pressing. Perhaps because of this Britain has been slower than many other countries to introduce standards of care for professional athletes in the twentieth century, just as it was slower to adopt the scientific coaches and training tables of American athletics a century ago (a point carefully documented by Roberta Park in *Sport and Exercise Science* [1992]).

All this has changed now with the globalization and commercialization of soccer as part of celebrity culture. The media blitz on the state of Wayne Rooney’s foot before the 2006 World Cup shows just how important the bodies of top players have become from head to toe and how sports medicine has become an increasingly specialized career with the potential for very large incomes indeed. Top clubs vie to exploit advances in sports medicine knowledge to keep ahead in preparing their players and gaining match advantage. (In recent news reports of David Beckham’s signing by Los Angeles Galaxy, sports medicine experts were brought in to vouch for the fact that Beckham’s thirty-one-year-old body could be kept going profitably for the length of his California contract.) Carter has detailed his interesting historical discussion of football club doctors and managers in his 2006 Routledge monograph, *The Football Manager*, to demonstrate how and why Britain was a late starter in bringing medicine and sport together on behalf of football, and his details of the actual job of the football club doctor are fascinating. Once regarded as something of a gentlemanly role, it has now—not surprisingly—become subject to the commercial realities of business and the demands of sport medicine accreditation.

While Carter adds to the discussions about just what is a sports medicine professional and what exactly do they do, using British football clubs as context, Wrynn, comes at the topic of sports medicine from a different angle, carefully sorting out categories and tracing institutional developments around the body in her analysis of the historical connections between American athletic trainers and physical educators. She offers us a complex detailing of the shifting relationship in the U.S. between sports medicine and athletic training.
and the connections of both to physical education. Her project, including a close textual analysis of professional documents, is designed to differentiate athletic trainers and coaches from physical educators and physicians and to show how their training has developed in conjunction with, or in opposition to, these other professions.

In an overview of the “official” history of American athletic training she builds upon the foundational work of Park on the training of athletes in the U.S. and Jack Berryman’s detailed history of the American College of Sports Medicine, excavating the largely overlooked earlier period of interest in athletic training during the late nineteenth and early twentieth centuries by exploring the writings of physical educators in their professional journals (many of whom were doctors themselves). She also shows how international meetings and congresses, from the second half of the nineteenth century through the twentieth were hugely important arenas for sharing knowledge around sports medicine practices, particularly research in Germany. With some notable exceptions, the global effects of these congresses in the dissemination of knowledge around sport, health, medicine, and athletic training as well as their effects on professional developments in both medicine and sport have been very much underestimated.

The conclusions Wrynn draws are gloomy ones for the profession of physical education but are no surprise given the history of the profession on both sides of the Atlantic as well as in the antipodes. She suggests that the divide that developed between the professional or allied health fields, which have emerged from physical education at different junctures since the late nineteenth century, is now such a chasm that physical education has lost its initial close alliance with medicine and much of its raison d’être along the way. She speculates whether it is too late to rebuild this alliance—or if it is lost for ever, and she is not alone in doing so. It is a question debated by sport scientists, historians, sociologists, educators, and policy makers each time a medical, health or social problem is attributed to a lack of physical activity and physical educators are castigated for their inability to provide the cure. The current crisis over obesity is only the most recent example. Medicine has moved in to claim control over an increasing number of allied health professions including the recognition by the American Medical Association in 1990 of athletic training as a bonafide allied health care profession. In this respect, the studies on the history of sports medicine in this forum are a useful and important contribution to our understandings of the development of a host of related professional developments around the sporting body including corrective therapy, occupational therapy, physical therapy and many more, all of which require further historical scrutiny and careful comparative research.

5Note, for example, the changes in research funding organizations from medical research councils to health research councils accommodating a much wider range of research studies.


23Canada, for example, brought to Athens a chief medical officer, a chief therapist, six physicians, six massage therapists, eight physiotherapists, six athletic therapists, two chiropractors, a nurse, a sport psychologist, an exercise physiologist, and the clinic manager.


27For example, studies on international congresses by Roberta Park, Susan Brownell, and Henning Eichberg.