Forces Driving Change in the US Exercise Industry Today

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ABSTRACT

In this commentary three issues for reader consideration are presented which the author believes have a dominant influence on the health fitness industry today - issues that will continue to markedly influence opportunities and performance expectations for practitioners in the years ahead. While several scholarly and opinion articles are cited, this viewpoint is rooted in the principal author's 45-year experience in developing and evaluating clinical exercise services, competency-based certification, related standards and guidelines for professional organizations, and extensive service as an expert witness in exercise injury litigation. While some influencers have been transitory and short-lasting, others have been persistent and likely to have even greater impact in the future. *Journal of Clinical Exercise Physiology.* 2017;6(2):17–21.

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ISSUE 1: EMERGENCE OF PHYSICAL ACTIVITY AS A *NECESSARY* ELEMENT OF MEDICAL CARE

Undoubtedly, this issue is the most powerful force driving change today. For the last 30 years, there have been remarkable advances in research linking physical inactivity to risks for developing noncommunicable diseases. This also includes a significant body of work that affirms a dose-response relationship between increments in physical activity and decreases in risk of death for several major chronic diseases. In support of this point, see the Das and Horton (1) article in *Lancet* that points to strong evidence that over 5 million deaths annually are attributable to physical inactivity. They cite further evidence demonstrating that inactivity is just as powerful a risk factor as obesity or tobacco. In this same issue of *Lancet*, Reis et al. (2) call for broad-based policy development in all major social institutions, the purpose of which should be creating opportunities, incentives, and a general cultural shift to healthful physical activity for the entire population A 2013 meta-analysis published in the *British Medical Journal* (*BMJ*) that presents outcome data from 147 studies on nearly 150 million person-hours of physical activity lends further support (3). These findings presented in *BMJ* strongly suggest that total daily physical activity of all types, not just recreational activities, lowers disease risks for breast cancer, colon cancer, diabetes, ischemic heart disease, and ischemic stroke. The *BMJ* article also lends support to the strong dose-response relationship between physical activity and disease risk—so long as the dose is at least 150 minutes of brisk walking or 75 minutes of running per week. Doing 3–4 times this much activity was found to further reduce these disease risks.

This rising evidence has become widely acknowledged throughout society and is reported with consistent messaging in public media, government agencies, health care, and business communities. The main problem is that we still find that physical activity behavior in the US population lags woefully behind the recommended target levels of physical activity for health. In fact, a September 1, 2016, article in *Time* magazine indicated that only 1 in 5 of us get the recommended amount of exercise each week, while another 80 million more in the United States over the age of 6 are sedentary (4). This epidemic of sedentary lifestyle has added significantly to our financially overburdened health care system. To illustrate, consider that the attributable costs of physical inactivity to health care in the United States may be

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as high as $85 billion. That high cost has led governmental agencies to launch internet educational campaigns to promote exercise and health policy initiatives to encourage broad-based participation in activity.

Thus, it is most likely that physical activity will soon be regarded as an indispensable component of medical care. We already have a movement toward medicalization of exercise, for example, the Exercise is Medicine (EIM) model (EIM is affiliated with the American College of Sports Medicine [ACSM] and its partners). The EIM approach involves physicians quizzing patients on exercise habits, providing them with prescriptions, networking with community resources to help patients with engagement and activity behavior change, and then evaluating success through checks on adherence and health outcomes. In the last decade or so, health care organizations have begun to test the utility of EIM and similar new disease prevention programs at the community level. The prospects for expansion have been made more promising with recent improvements in digital tracking technologies and behavioral support strategies that can be used for lower-cost delivery of services to more patients outside of the traditional clinic setting.

Certainly, many people are now becoming more interested in physical activity for health. They can find effective, supportive environments in commercial facilities, in worksite settings, or with personal trainers. One need only consider the rapid growth and current scale of the commercial fitness industry to get a sense that the exercise business is flourishing—look online for the "Fitness Industry Analysis 2017 - Cost & Trends" report (5). This report indicates that there are now over 34 thousand fitness centers across the United States, generating more than $22.4 billion income per year and employing more than 533,000 recreation and fitness personnel. Individuals with medical considerations, including multiple disease risk factors, clinical diagnoses, physical disabilities, and older adults likely will continue to seek care within settings operated by the health care industry. These circumstances should continue to create more employment opportunities for fitness instructors and personal trainers qualified to meet the needs of those adults who do not have significant health issues or major clinical diagnoses. However, adults with combinations of older age, lower fitness levels, and more complex health conditions need and will benefit from daily physical activity just as much as other adults in the population. Will a well-trained and qualified clinical exercise physiologist become the dominant provider for these patients? As the opportunities continue to increase and evolve for the clinical exercise professional, direct involvement with physicians and hospital systems should be expected. This will lead to requirements for practitioners to produce evidence of competencies for fulfilling individualized physical activity prescriptions from physicians. Given the way that medicalized physical activity is evolving, physicians and health care organizations will be looking for practitioners who can provide not only appropriate, safe, and effective exercise plans but also guide patients via lifestyle counseling and support to help them achieve the skills needed for long-term, self-directed, physical activity adherence. As practitioner guidelines and standards emerge to guide conduct in this niche, practitioners will be drawn to the opportunities, whether or not they possess the full range of competencies expected. This will undoubtedly create anxiety for the health care workers looking for qualified practitioners to work with their patients in community settings—the tendency for them will be to enlist licensed allied health care providers who may or may not be qualified. In other instances, many nonlicensed providers and commercial facilities will be drawn to these opportunities, seeking to expand their clientele. Taken together, these circumstances might increase exposure of the "medicalized" exercise client to greater chances of physical activity–related injury and death. And such events inevitably would increase risks of personal injury litigation affecting not only exercise providers but also legal actions against referring physicians and community health care systems.

ISSUE 2: THE TRAJECTORY FOR EXERCISE-RELATED PERSONAL INJURY AND LITIGATION

The legal issues covered in *The Exercise Standards and Malpractice Reporter* and, more recently *The Exercise, Sports and Sports Medicine Standards and Malpractice Reporter* (*ESSMSMR)*, span approximately 30 years. For each issue, David Herbert, the editor, conducted careful examinations of the newest information resources from the exercise field, relevant personal injury lawsuits, emerging state and federal laws, standards, etc. Inspecting the newsletter issues for chronologic trends suggests the following.

Between 1988 and 2002, the predominant themes were related to

- informed consent, waivers, and releases;
- graded exercise testing and supervision;
- health-risk screening prior to beginning exercise participation;
- aerobic dance class leadership and associated facility issues;
- standards and guidelines from professional associations (e.g., ACSM, American Heart Association, American Association of Cardiovascular and Pulmonary Rehabilitation);
- emergency cardiac care and use of defibrillators in exercise settings; and
- risk management, unauthorized practice of medicine.

Between 2002 and 2016, many of the issues from the foregoing 14 years persisted, particularly those involving exercise in the health care context. However, a new set of issues also emerged or occurred with greater frequency:

- Exercise services in health clubs and worksite programs;
- Negligence claims related to education and qualification of personal trainers;
- Injuries arising from the use of ever-changing novel exercise gimmicks, devices, or the use of same with untested procedures developed by trainers for their clients (e.g., elastic bands, exercise balls, kettlebells);

- Increased advocacy and lobbying activity aimed at establishing public regulation of personal trainers or clinical exercise physiology practitioner groups. Apart from Louisiana, the only state to license clinical exercise physiologists (Louisiana Revised Statutes Title 37, Acts 1995, No. 630), none of these efforts has been successful to date.

The many forms and styles of exercise routines that are touted to produce miraculous results come rather suddenly, are quickly adopted without being subject to risk-benefit analysis, and are short-lived. An inventory and review of these routines and devices is beyond the scope of this article; however, several useful summaries, news commentaries, and other e-publications detail this information. See Gibson's article in the July 5, 2016, *Washington Post*, which suggests the most popular devices and programs that have come and gone since the 1950s, beginning with the Hula Hoop and moving to multistation home gyms, the more recent branded boot-camp–type franchises and wearable digital activity monitors. For more such viewpoints, see the American Council on Exercise website for McCall's article on the top 10 fitness trends for 2016 (https://www.acefitness.org/blog/5762/10-fitness-trends-to-look-out-for-in-2016) and Keller's article at the IDEA Health & Fitness Association website on the top 15 group fitness predictions for 2016 and beyond (http://www.ideafit.com/fitness-library/15-group-fitness-predictions).

New devices and novel programming strategies always appeal because they provide exercise clients with flexibility and novelties that motivate and hold their interest. However, the downside to many of these is that they nearly always lack objective evidence of safety, health efficacy, and potential for raising fitness levels in ways that improve performance and physical function for daily living. Also, with many of these novelties, client interest quickly wanes and shifts to other incoming gimmicks and methodologies—well before adequate objective evaluation of effectiveness and safety can be established. Meanwhile, without sufficient guideposts, use of such trendy devices may be just as likely to cause serious injury as health benefit.

Yet, sometimes novelties come along that gain traction. In our view, the physical activity tracker is one of these. This technology is still rapidly developing and has a long way to go before we understand how best to apply it to facilitate improved and sustained physical activity behavior for the masses. Still, it has outstanding potential to become one of the best means to promote and document activity in the free-living environment, as well as to accurately inform physicians of their patients' risk for cardiovascular disease and the extent to which their physical activity recommendations are being followed—see the *Medscape* article for more information on these prospects (6).

ISSUE 3: TOO MANY LETTERS IN MY ALPHABET SOUP AND WHAT'S AHEAD FOR A FRAGMENTED "MEDICALIZED" EXERCISE PROFESSION?

In 1975, the ACSM published its first *Guidelines for Graded Exercise Testing and Prescription* (*GETP*). Grassroots concerns of the exercise scientists and physicians who wrote that first edition emphasized, above all, safety and evidence-based guidelines. The motivation was to ensure clinically relevant outcomes and minimize acute risk for patients participating in the many cardiac rehabilitation programs that were rapidly emerging in the United States during that decade. Nine more editions of ACSM's *GETP* have been released at regular intervals since that time. Each has incorporated evolving scientific evidence and lessons learned from clinical practice. Considerable content has also been progressively added to later editions of the *GETP* that apply to exercise applications for an expanded range of chronic disease conditions, as well as for healthy adults and children.

ACSM's *GETP* book, and the companion educational resources, have become the gold standard for exercise practitioners to use for developing exercise programs for clients. The importance and implications (legal and otherwise) of these ACSM publications have become essential guideposts for those who provide services to patients with one or more chronic diseases, others who only have disease risk factors, and healthy individuals. In our experience, these benchmark ACSM publications have been pivotal resources for defining the conduct of exercise providers who become defendants in personal injury lawsuits. All exercise professionals should anticipate that ACSM's *GETP* and associated publications will likely be regarded as the benchmark of conduct for exercise professionals for many years to come—in regard to expected provider conduct in personal injury cases by attorneys and expert witnesses who testify on behalf of either plaintiffs or the defendants.

In addition to publishing its first *GETP* in 1975, at nearly the same time, ACSM launched its first professional certification program. The certification was based on requisite knowledge and skills that underpinned capabilities to deliver services specified in the *GETP* publication. As part of the credentialing process, candidate prerequisites were established, a review workshop was given, and a first program director certification exam was delivered to a small number of candidates. Later that same year, ACSM followed with its first exercise specialist (now named clinical exercise physiologist) certification and, in the next year, with the exercise test technologist certification.

The ACSM, arguably, pioneered the credentialing movement in the health/fitness area in the United States, establishing a system that was later adopted by many other organizations, both nonprofit and commercial. Most of the credentialing activity growth that occurred in the health/fitness area began 10 years after ACSM began its certification programs for clinical exercise personnel. The ensuing 30-year growth in health/fitness credentialing may have been borrowed from the ACSM clinical model, and the numbers have been remarkable. Today, the dominant groups include the Aerobics and Fitness Association of America (AFAA), the International Sports Sciences Association (ISSA), the American Council on Exercise (ACE), the National Academy of Sports Medicine (NASM), and

the National Strength and Conditioning Association (NSCA). Beyond these are dozens of others. It is difficult to access accurate statistics regarding the numbers of certificants who have completed and maintained (continuing certification requirements) these credentials. The ACSM has grown its certification program, modifying, relabeling, and increasing its offerings, and now has 10 different credentialing options. The ACSM has certified well over 20,000 individuals. The Aerobics and Fitness Association of America alone, in the commercial sector, states that over 350,000 fitness practitioners have completed one or more of its certifications. It would not be surprising that all fitness professional certifying organizations in the fitness industry have administered close to a million credentialing exams since the mid-1970s. Using a cost figure of $250 per initial credentialing exam, this industry would have generated an estimated $250 million in income since the mid-1980s. With the addition of candidate costs and fees for instructional materials, online and in-person workshops, courses, and recertification, this indeed has become a most lucrative industry. Thus, there is a strong financial incentive for each organization to further grow, differentiate, and protect the proprietary aspects of their credentialing business, training programs, etc. In one sense, this is a natural outgrowth of the rising public demand for qualified practitioners. The public needs to be able to identify fitness personnel who have met certain basic knowledge and skill requirements. If there is a widespread public understanding of what these credentials mean, clients can make sound decisions about who may provide reasonable and safe exercise instruction and programs.

However, there is a staggering number of these credentials, with a host of associated acronyms. It is a sea of acronyms—an alphabet soup of confusion—for even the most diligent consumers and for physicians who may want to confidently refer their patients for physical activity education, programming, and counseling. At present, there is a strong movement toward incorporating physical activity as a basic aspect of patient care, that is, positioning physical activity as one of the vital signs of a patient's health status (along with the other five traditional signs, such as blood pressure). At the same time, we are seeing an equally rapid proliferation of these clinically coded credentials from many certifying bodies—and some of these organizations may be motivated to maintain their market position and profits. Each certifying body intends to position its certificants to succeed in capturing new patient referral opportunities that will come from physicians and health systems across the United States.

The most serious concern about this circumstance is that not all of these certifying bodies rely on the same set of competency expectations or educational and experiential requirements. In the past, the clear majority of credible certifying bodies relied heavily on evidence-based ACSM position stands, ACSM's *GETP* publications, and similar sources from the American Heart Association, which have been the basis for most credentialing bodies to write their study materials and exams for certification candidates. Now, multiple medicalized credentials are being offered to practitioners, and the potential for using alternative sources for exam and exam preparation will surely increase. Over time, as medicalization of exercise takes a foothold in health care, these variations in foundations and credentialing will pose a significant concern regarding readiness of certificants to fulfill expectations for service delivery. One consequence may be a rise in the rate of exercise-associated personal injuries to patients and associated litigation.

Finally, there is the need to address the pervasive issue of licensure for exercise practitioners. In *ESSMSMR*, the editor has tracked the ongoing efforts of various groups attempting to lobby for licensure of health-fitness practitioners. This effort has spanned several years, one example being the May 2015 article "Massachusetts again proposes a bill to license personal trainers" (7). Several attempts have been made to introduce regulations like this one in various states and some municipalities. Yet, none of these bills have garnered sufficient support to be enacted. Certain powerful players in the commercial industry have lobbied against these proposals, seeing such regulations as a first step leading to added operating costs and other constraints that they deem unacceptable. Furthermore, lawmakers seem to have little enthusiasm these days to increase the burden and costs of regulating yet another health-related profession; at least unless persuasive evidence is presented of significant risk of harm to the public.

The situation may be different for the clinical exercise practitioner, however. The ACSM has a stake in this issue, as a result of its commitment to the many clinical exercise practitioners it has certified since 1975. In addition, achieving licensure for clinical exercise practitioners might pave the way for health care reimbursement, since it will involve fulfilling physicians' prescriptions for patients to exercise.

How this may play out in the next decade or so is most uncertain. There is little doubt that physical activity is on the cusp of being medicalized and that qualified practitioners, competent at levels well above health-fitness practitioners, will be needed to meet this need. Of course, some already licensed providers are in an advantageous position to expand their scopes of practice and/or develop subspecialties that enable them to take on these growth opportunities, for example, physical therapists. The challenge to the aspiring clinical exercise physiologist, in general, is one of organizing in ways that can create a singular uniform competency standard, enable development of a critical mass of practitioners that can effectively mount lobbying campaigns, and succeed in lobbying for licensure in a majority of states across the United States. Due to the relatively small number of practicing ACSM certificants in the clinical area at the present time, this might be an unattainable challenge in the near future. It may require collaboration and compromise from multiple organizations that certify medicalized exercise practitioners, with ACSM's affiliate organization, the Clinical Exercise Physiology Association (CEPA), providing leadership. Otherwise, in the absence of a compelling

critical mass of professionals to push forward in unity for licensure on a nationwide basis, this might become a missed opportunity.

CONCLUSION

What will be the interplay of these factors and their future impact on health/fitness and disease prevention services and practitioners over the next decade or so? We leave it to *Journal of Clinical Exercise Physiology* readers to forecast and act to effect change that promotes broad participation in safe and health-efficacious exercise for the US population.

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