

The Rise of Consumer-Based Blood Testing: A Huge Step Forward for the Exercise Physiologist

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A RECENT REPORT in Forbes Magazine by writer Unity Stokes discusses the recent issues concerning the validity of blood tests results from a Silicon Valley lab company called Theranos. While reading about the validity of blood tests may be considered more important for healthcare professionals such as a medical doctor or a nurse, it is time that exercise physiologists as health and fitness professionals take a moment to think about it and what it may mean to their practice.

As an example, Theranos is a blood lab company that uses finger stick methods to ascertain results for over 150 blood components. Although the company is relatively new, it is valued at over \$5 billion. The goal of the Theranos is to completely disrupt the current blood laboratory marketplace.

Once again, while this may not mean too much to exercise physiologists at the present time, it may be important especially for those with the desire to work in healthcare as entrepreneurs. In addition to the role of exercise medicine in the prevention and treatment of chronic diseases in their clients and/or patients, having access to their blood components should encourage a better understanding of the individualize exercise prescriptions.

The consumer based blood lab companies allow patients to log in their websites, and essentially become “members” of an online community. Their membership allows them to receive blood labs independent of their physician referral. Why is this important? In addition to the traditional exercise physiology laboratory assessments of the client’s cardiorespiratory system, it is an important step for the exercise physiologist to improve the client’s care. In short, blood labs will allow exercise

physiologists to refer their clients, patients, and athletes to blood lab companies online to directly test the effects of an exercise medicine program on their health and well-being or a sport-specific training program on their health and/or athletic performance.

Blood Labs in Exercise Medicine Clinics

According to StepOne Health CEO Craig Brandman, MD, over 80% of healthcare decisions are made by the results of blood labs. Further, in exercise medicine, we can only imagine looking at blood labs on an on-going basis to see how our prescribed exercise (or sport) programs are doing on specific blood lab parameters. Take diabetes, for example, in athletics or health improvement, the basis for medical decision making is in two critical areas: (a) fasting; and (b) postprandial blood glucose testing with a home monitor, and long term care regarding the glycosylated hemoglobin (A_{1c}). These tests are crucial to seeing how improvements are making in overall diabetes health. The first test – the home glucose monitor – can be used in any exercise medicine clinic and by anyone. The A_{1c} test is a lab test and is usually prescribed by a doctor, that is, until now.

Dr. Brandman has been in communication with me for over a year to bring StepOne Health into the realm of the health and fitness profession, especially exercise physiologists. As a former medical researcher, I can't agree more. With cancer patients, weight management, hormone management, cardiovascular risk patients, and most other chronic diseases and disabilities, the ability to manage the client's and/or patient's blood labs may be the most important element in showing others in healthcare the benefits of exercise medicine and sports training at any level.

Blood Labs: Their Value in Sport Training

Sports training programs rely on physical performance markers, injury status, range of motion, and other elements to document the improvement in athletes. Blood testing allows them to not only measure acute markers (blood glucose and/or lactate in particular), but to look at markers such as Creatine, Testosterone, and BUN levels and prescribe fitness and training programs accordingly.

How will this come to pass? In my conversations with Dr. Brandman, we are working on two fronts. The first step is to enhance the education of exercise physiologists (and other healthcare professionals) through a certification program. I will be launching the Blood Lab Wellness Specialist course in the first quarter of 2017, and it will allow exercise physiologists, in particular, to have a baseline understanding of the blood lab process. The second step is that StepOne Health will create a referral-based system whereby exercise physiologists can directly refer clients to the StepOne Health portal and become part of the referral family. This will

include discount rates on blood panels, referrals fees for exercise physiology professionals, genomic testing profiles, and online coaching when needed.

Recently, I had the opportunity to interview Dr. Brandman regarding the public healthcare issues and challenges of the 21st century. In his opinion, it seems only logical that exercise physiologists, particularly the ASEP Board Certified Exercise Physiologists, should refer their clients and patients to blood work. The more their clients and patients know about how their health and fitness impacts their overall health and performance status the better.

Conclusions

Lastly, the profession of medically based exercise is increasingly being recognized as exercise medicine. Allowing for blood lab data (under HIPPA guidelines of course) to steer the course of exercise medicine programs makes for formidable outcomes measures and research. It will allow exercise physiology healthcare practitioners to have clear-cut outcomes on the programs they are supervising, which will strengthen the association with medical practice groups, hospitals, and health plans (who are looking for the best opportunity to work with providers at the best possible pricing). It is a win for the clients and patients who can witness how exercise medicine truly affects their health and well-being.

Reference

<http://www.forbes.com/sites/unitystoakes/2015/11/04/despise-clamor-surrounding-theranos-the-entrepreneurs-vision-of-transforming-diagnostics-is-near/>