



A Business Plan for the Heart

Just as a business plans for its future health, so too must individuals. Help your employees and clients with realistic investment goals and the means to track their successes and failures.

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If you don't know where you are going, you will never get there. This is true in all aspects of life, but no truer than with cardiovascular training. If clients are overweight, out of shape and have preventable disease, they probably lack a plan and the appropriate incentives to achieve success — which, in this case, is optimal health. Genetics do play a role, but prudent investment in exercise and a diversified lifestyle program will yield the desired net gain.

The words above are usually reserved for the business world, and are common language for MBAs, accountants and CEOs, but this article will explore a new paradigm for the healthcare industry: It will take a pragmatic approach to the development of a business plan for the heart. Traditional concepts used in business plans will be used to develop a strategic plan for cardiovascular training.

Just the facts

Heart disease, stroke and atherosclerosis are the leading causes of death in men and women in the United States. Heart disease is the leading cause of death in the developed world, accounting for approximately one quarter of deaths. Most deaths occur within the first two days after a heart episode, while those who survive this period progress well, if they have not developed heart failure or serious arrhythmias. Participation in a cardiac rehabilitation program can promote recovery, enable patients to achieve and maintain better health, and reduce the risk of death in people who have heart disease. It has been shown that exercised-based cardiac rehabilitation can reduce fatal events by 25 percent in the first year of recovery, and significantly reduce overall mortality from cardiac illness. Recent studies of psychosocial and education-based cardiac rehabilitation have shown even more impressive benefits in terms of mortality, morbidity and quality of life.

Cardiovascular disease.

- 57 million Americans have cardiac disease.
- It's the leading cause of death in American women.
- It accounts for 945,000 deaths each year — more than all cancers combined.
- Six million hospital admissions have been attributed to cardiac disease.
- It causes 37.7 million lipid abnormalities a year.
- It's a major health issue for children ages 12 to 15.

Hypertension.

- Hypertension causes the death of 50 million Americans a year.
- The American Heart Association states that people who are inactive and out of shape face a 30 to 50 percent greater risk of developing high blood pressure (greater than 140/90).

According to the Centers for Disease Control (CDC), many Americans may be surprised at the extent and strength of the evidence linking physical activity to numerous health improvements. Most significantly, regular physical activity greatly reduces the risk of developing diabetes, hypertension and colon cancer; it enhances mental health; it fosters healthy muscles, bones and joints; and it helps maintain function and preserve independence in older adults.

Mission statement

“Even if you are on the right track, you’ll get run over if you just sit there,” said Will Rogers.

A mission statement is a sentence, phrase or paragraph that describes the goal of an existing or new business, and typically begins a business plan. Modify this concept to meet client needs and expectations: What are your clients’ ultimate cardiovascular goals?

Goals must be realistic and attainable, and your job is to make the statement realistic in scope and magnitude. A mission statement might be, “I am in the business of cardiovascular conditioning and fat loss. I will decrease my waking pulse by five beats per minute, and decrease my body fat by 5 percent.” The mission statement must be written down, put in plain sight, and reviewed and/or revised frequently.

Competitive analysis

Any astute businessperson approaching a new business venture will research the competition. Commonly, this process uses an analysis called SWOT (strengths, weaknesses, obstacles and threats). So, who is the competition and how are they doing?

The three greatest competitors are inactivity, lack of information and poor direction and instruction. Inactivity can mushroom among a population when there is lack of information about how to combat the risks associated with it. It can become even further exacerbated by facilities that fail to provide adequate services and advice to achieve exercise success. However, the advantages of fitness *are* now being actively promoted by the medical industry, insurance industry, HMOs, individual companies and the government, resulting in a significant increase in awareness and focus on the benefits of exercise. The influence of the medical field will drive future additional health club demand. Since the 1996 publication of

the first report of the Surgeon General on Physical Activity and Health, the medical community has increased its emphasis on the benefits of exercise. The report proved what everyone knew for years: physical activity is directly related to preventing disease and extending longevity.

In the past, the government’s influence has been increasing awareness of important public health issues, including the adverse health consequences of smoking, as well as reports on HIV/AIDS, both spawning major public health initiatives. Now the government is on the fitness bandwagon. As a result, the American Heart Association, American Cancer Society, National Arthritis Foundation, CDC, National Institute on Health, IHRSA and others founded the National Coalition for Promoting Physical Activity to address the major health and financial consequences of physical inactivity in America. Additionally, since 1996, many research reports on exercise have been published in major medical journals, representing that exercise reduces the risk of many diseases. These same journals also published on the dangers of smoking.

Going public

Often, a business that has a proven track record of revenue growth, earnings and market share will raise capital so it can grow. One way to raise capital is to offer shares in the business, called an IPO (initial public offering). With cardiovascular training, the process is the same. The plan is filed with the coach and includes the financials, the management team and the competition.

One of the critical components of this disclosure is future earnings estimate. Disclosing this information to others will put pressure on the client to achieve the stated goals. This disclosure of intent will inform and educate those individuals who have di-



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rect and frequent contact with the client of the business plan. They will, therefore, become the “management team.” Starting with those closest to the client is best. Immediate family and friends are the best management team, as are co-workers and business associates. Going public with a cardiovascular business plan will let the management team and others know of their commitment to become healthy.

The management team. In the words of Ray Kroc, founder of McDonald’s, “You’re only as good as the people you hire.” A client entering into the heart rate business has researched the competition and ascertained who is doing it right and who is doing it wrong. They went public. Now it is time to assemble the management team. This team is critical to the success of the program and business plan. Well-run companies have a select few who make up senior management. These individuals create and steer the course of the business. The team includes those closest to the client, including the coach. Potential members are everyone who has a vested interest in these individuals and their success, such as a spouse (significant other), co-worker, exercise physiologist or workout partner.

A business plan. Schedule a meeting with the management team and develop an agenda to articulate the business plan. Tell clients to be specific about what brought them to this decision. Summarize the business plan philosophy and outline how this will help achieve their goals. Such goals could be to increase exercise tolerance; gain the ability to walk 3 miles at 55 to 65 percent max heart rate; follow an exercise prescription prior to the onset of disease; decrease total cholesterol below 150; maintain appropriate exercise and diet for the prevention of disease and comorbidities; drop blood pressure to 120/80; improve circulation to prevent peripheral arterial disease; enhance lifestyle; play catch with the children on weekends; or to walk the entire day at Disney World during vacation.

Be clear to your clients that they will need help: Everyone needs help to achieve the goals of a business plan. Be clear about helpers’ roles, whether it’s assisting with testing to determine appropriate heart rate levels for exercise or as an exercise partner. Explain the business plan theory and why it can work.

The financials

Beginning exercisers, those increasing the intensity of their programs or those with exercise risk factors should have a graded exercise test (GXT). The American College of Sports Medicine recommends that men over age 45 and women over age 55 have a GXT prior to initiating an exercise routine. This test is usually given under the supervision of a cardiolo-

gist. It determines appropriate maximal heart rate and gives valuable information regarding cardiovascular response to increased workload. The test also determines the electrical response of the heart under stress, and blood pressure and heart rate response to increased demand. These factors are critical for determining the appropriateness of exercise and exercise intensities. This test should not be confused with certain commercial tests now available.

The test is conducted by having the client breathe through a mouthpiece during rest or exercise. The volume of air moving in and out of the lungs, oxygen consumed, carbon dioxide produced and heart rate are recorded for every breath. During

the early stages of the test, the body responds efficiently, using fats and carbohydrates as a fuel source. As the workload increases, the energy demands eventually exceed the body's ability to use oxygen and burn fat as a fuel source. At this point, lactic acid begins to accumulate in the blood. This is known as the anaerobic threshold, and usually occurs between 45 and 90 percent of maximum heart rate. Knowing this "financial" information will assist in developing a plan for "financial" success, as seen in improved cardiovascular condition, weight loss or maintenance.

Due to technological advances, this valuable testing procedure is now available commercially, and is found in progressive healthcare facilities. The variability ranges from resting metabolic rate (RMR) to sub-maximal VO₂, and, if conditions permit, to max or peakVO₂ max assessment, allowing the clinician to glean significant insight into their clients' physiological level of function. Armed with these vital statistics, valuable projections can be made and revenue (improved fitness) increased.

It's important to remember that other variables may impact clients' ability to achieve financial success, such as level of daily stress, nutritional habits, sleep, climate and overtraining.

Revenue allocation. Once the financials are tabulated, various intensity levels can be formulated and matched to the corresponding exercise heart rates. These heart rate intensity levels (ILs) are unique to each individual's metabolic (financial) profile.

IL No. 1: 55 to 65 percent max heart rate, which is the perfect level to burn fat as the primary energy source, and the level for beginners. It should be maintained for 15 to 40 minutes, three to four times a week. This may also be used as a recovery level for well-trained athletes.

IL No. 2: 65 to 75 percent max heart rate, which is the perfect level to improve overall cardiovascular endurance and reduce weight. It promotes glucose sparing and primarily uses fat as an energy source.

This is referred to as the cardiovascular base level. A sustained effort at this level for 30 to 60 minutes, three to four times per week, will yield the desired results.

IL No. 3: 75 to 85 percent max heart rate will improve lactate tolerance, break through workout plateaus and improve mental toughness. This intensity level should be performed one to two times per week, preceded by a good warm-up and followed by 10 to 20 minutes sustained at this heart rate. An

adequate cool-down and flexibility work will prevent staleness and muscle soreness.

IL No. 4: 88 to 90 percent-plus max heart rate, used by elite or recreational athletes to improve anaerobic conditioning and increase speed. Performed in short intervals, the key is the recovery following each interval. Recovery should be to IL No. 1 before initiating the next interval. This is a performance-enhancement level. Typically, this workout is preceded by a warm-up, gradually increasing the heart rate, and then progressing into four to 10 intervals of various length (100, 200, 300 and 400 meters, for example), interrupted with recovery down to IL No. 1 prior to initiating the next interval. Appropriate cool-down is also recommended. IL No. 4 should not be undertaken more than once a week.



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Preservation of capital

For investments, whether in stocks, bonds or real estate, preservation of capital is critical (i.e., keep the capital, don't lose money and make a profit). The same approach is applied to the heart rate exercise plan. Train your clients for maximum gains (profits). Using the financial Performa provided, clients can see immediate and long-term gains.

Track the results by setting up a spreadsheet that clients can fill-in and relate to. To initiate this process, have them write down three or four favorite activities (similar to favorite stocks, bonds, etc.). Next, develop a success scale. Track progress by having them answer these questions each week:

- "Are you doing your favorite activities?"
- "What was your resting heart rate, taken at the same waking time each week?" They should wear their heart rate monitor for this process, as manual readings are inaccurate.
- "Rate how you feel on a 10-point scale, with 1 being 'the worst I've ever felt,' and 10 being 'the best I've ever felt.'"

Also track clients' daily activity as related to frequency, duration (time, distance, etc.), intensity (heart rate), and additional

revenue enhancements, such as increased caloric expenditure; increased strength; decreased incidence and severity of injury; joint stability, core stability and improved flexibility; improved bone mineral density; decreased total cholesterol (below 150); increased HDL cholesterol (above 45); decreased LDL cholesterol (below 100); improved glucose metabolism, which diminishes risk of type II diabetes; reduced risk of colon cancer by increasing transit time; reduced blood pressure; improved

posture; increased energy; decreased risk of falls in the elderly; and improved mood and decreased incidence of depression.

These and others are realistic investment goals for the business plan for the heart.

Heart rate monitors

Clients' financial success is dependent on one specific tool: the heart rate monitor. Just as the CFO (chief financial officer) uses a calculator, the business plan for the heart uses a heart rate monitor. There are many to choose from, and the "buyer beware" concept applies.

The most accurate heart rate monitors commercially available come in two parts: transmitter and receiver. The transmitter is worn around the chest and is made of conductive rubber electrodes that provide continuous contact with the skin. The rubber electrodes are flexible, allowing the transmitter to move freely and comfortably during exercise. The transmitter counts the number of heartbeats and transfers the information directly to the receiver. This is different from contact heart rate, which is not as accurate as continuous heart rate, and may distract clients, causing inaccuracy in actual heart rate, or injury due to the change in concentration. However, this may be the only option in the existence of obesity, heavy scarring on the chest (thoracic surgery) or arrhythmia.

The receiver may be in the form of headphones, or a functional and fashionable watch. They range from simple to complex — displaying heart rate only, to features including a stopwatch, alarms and various heart rate monitoring features (time in target zone, total exercise time, caloric expenditure and recovery). Additional features include altitude and bicycle interface for power (Watts), distance and cadence.

The receiver acts as your personal digital assistant. Information can be preset, recorded, replayed and downloaded for statistical analysis, financial report generation and projections. In addition, this information can be used in conjunction with Palm Pilate/PC-compatible programs for diet and exercise planning and tracking, and adherence. Personal digital coaches can guide clients through an exercise session, and help them to maintain proper exercise levels. Much as financial decisions are made based on the Performa and projections, exercise programs can be based on an objective assessment of the body's metabolic and fitness profiles.

It's all in the plan

Comparable to the principles learned in business and financial institutions, the business plan for the heart is based on proven scientific principles, and evidenced-based randomized clinical trials in the realm of exercise physiology. This personal

exercise program uses an objective assessment of metabolism and fitness level to provide exercise professionals with the tools to develop an individualized exercise business plan. Whatever the weight or fitness goals, the business plan for the heart can help individuals live a more fit, productive and enjoyable life. All it takes is a plan! **HRC**

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