
HEALTH AND WELLNESS RETURN ON INVESTMENT (ROI)

DO HEALTH AND WELLNESS PROGRAMS GENERATE POSITIVE ROI?

Most business investments are guided by a discussion of the projected Return on Investment (ROI) and Health and Wellness Programs (HWPs) are no exception. However, the calculation for HWPs is complicated by the reliance on employee engagement, appropriate assessment tools and benefits that occur over time some of which may be difficult to clearly discern. This analysis is much more complex than the consideration of will profit improve from a new machine that can make 100 more widgets a day. The Society of Human Resource Managers (SHRM) has issued numerous position papers on HWPs that review the qualities of an effective HWP and the associated ROI.

The Rand Corporation (a nonprofit research institute) reported on a Fortune 100 company's ten year experience and examined two aspects of the employer's wellness program, lifestyle and disease management savings. The Rand corporation reported an overall ROI of 1.5 (disease management ROI was 3.8 while the lifestyle management ROI was 0.5) and that it takes an average of 5 years for a new wellness program to become cost-neutral¹. However, other researchers have pointed out that the Rand report did not include any potential productivity benefits from lifestyle management which is difficult to assess and quantify, thus frequently omitted from ROI calculations. This phenomenon has been called the Employee Positivity Factor and can manifest itself through better workplace productivity, decreased employee turnover, improvement in co-worker and client interactions, etc. Obviously, some of the financial benefits associated with these improvements may be difficult to assess potentially obscuring ROI determination.

In stark contrast to the Rand report, a Harvard University meta-analysis of 100 peer reviewed journal articles reported that a properly designed wellness program can result in a ROI of 3.27 for health care cost reduction and 2.73 for absence/productivity after three years for a total ROI of 6². Larry S. Chapman reported a similar ROI of 6.1 in more recent studies compared to 3 in older studies in his meta-analysis of 56 journal articles and that it usually takes 3 to 5 years to realize a HWP's full impact³.

Thus, any new disruptive technology designed to better engage the individual in their health must clearly demonstrate how and why the technology expands on current HWPs to validate a future positive ROI.

One must keep in mind, Sibson's Healthy Enterprise Study which reported that 40% of all wellness programs are ineffective, but that many of the remaining 60% generate strong financial return⁴. Obviously, not all Health and Wellness programs are created equally.

CHARACTERISTICS OF SUCCESSFUL HWPs

The Center for Studying Health System Change (HSC) concluded that wellness programs need to be customized to the organization, integrated, comprehensive, diversified, connected to the organization's business strategy and have strong support from executive and management leadership⁵. In addition, there needs to be a good overall long term strategy, including offerings that generate a sense of purpose and improve the work environment.

The authors of "Making the Case: New study Shows it Does, Indeed, Pay to Become a Healthy Enterprise" maintain that the most effective HWPs include strategic drivers (management buy-in), behavior change support (easy to use modification support tools for the employee and family to improve fitness, nutrition and risk factor avoidance), environmental support and a focus on optimal behavior. The common denominator to successful wellness programs is a strong foundation rooted in an effective workplace and a strong supportive culture⁶.

Ultimately, the success of the HWP is highly dependent on the employee's and family's (60% of health costs are from the employee's family) participation and engagement in the HWP. Here it is important to review the factors that affect an individual's participation and engagement in their organization's HWP. When non-participating individuals were asked to list reasons why they did not engage in the offered HWP, 70% believed that they could make changes on their own (how do they know what changes to make, associated goals and if they can do it on their own, why haven't they) and 56% lacked the time⁷. Inconvenient location (25%) and time the HWP is available (24%), program awareness (17%) and privacy and security at 14%⁸ were all noted. Cash incentives motivated employees more if they had high deductible insurance programs⁷. Thus, a HWP design must address these shortcomings to optimize its success. As any given population has a range of preexisting health engagement, Dr. David Bates, C.I.O. at Brigham and Women's has emphasized the importance of including multiple engagement strategies to activate employee engagement in a Health and Wellness interface.

HWP ROI IMPROVEMENT STRATEGIES

The HWP industry needs to examine and apply the lessons learned in the health care space as improved health and decreased costs are fundamental goals of HWPs. Numerous peer review medical publications have clearly demonstrated that improved health engagement improves the individual's health and decreases health care costs. An estimated 290 Billion dollars annually are wasted in the U.S. secondary to noncompliance and inadequate treatment⁹, 374 Billion dollars annually (over \$1,000 per person) are spent on pharmaceuticals¹⁰ and numerous Telehealth initiatives have demonstrated improved health outcomes and cost savings through connectivity of the employee to their provider¹¹.

Thus, employee engagement (improves health outcomes and decreases costs), pharmaceutical adherence and reconciliation are crucial to containing health care costs. This is important to the individual and the entities who pay health care costs.

Additionally, 1/3 of adults in the U.S. have hypertension (only 54% are adequately controlled) with another 1/3 considered to be pre-hypertensive, 1/3 of adults are obese, diabetics average twice the health care cost of nondiabetics, hypertension related death rates in the 45-64- year-old age group have increased by 58% in males and also significantly in females¹². These pervasive chronic health issues demand much more than an annual biometric screening for effective screening and treatment to occur.

Imagine generating an annual sales forecast based on one day of sales. Lastly, as 60% of health care costs originate from the employee's family, they must be included if ROI is to be optimized.

Individual health engagement is crucial for improved health outcomes, decreasing health care costs, preventative health initiatives, early intervention in disease trajectory and avoidance of disease progression. Every chronic disease has a trajectory that if left untreated generates progressive morbidity, increasing costs and potentially mortality. Thus an effective HWP must incorporate ongoing population screening techniques of self-reported biometric data so that a chronic disease can be detected as soon as possible to avoid this progressive morbidity and mortality. A matched cohort of healthy employees (not taking antihypertensive) demonstrated that ambulatory blood pressure (self-reported) is superior to clinic blood pressure as a predictor of cardiovascular morbidity and mortality¹³. Thus HWPs need to incorporate a population screening platform for self-reported blood pressure. In addition, by the continuous documentation that a chronic disease is being treated effectively this natural disease progression can be slowed providing an ongoing additive source of ROI as the cost of "lifetime disease treatment" will be decreased.

WHAT HAVE WE LEARNED?

HOW TO IMPROVE HWP ROI AND WHAT IS NEEDED IN DISRUPTIVE TECHNOLOGY

Literature review clearly supports that an effective, properly designed HWP can generate upwards of a 6 ROI over a three to five-year period with disease management accounting for the majority of return. Disease management includes screening, diagnosis, compliance, self-monitoring of disease(s) related biometric(s) and provider connectivity to confirm adequate treatment (facilitated by Telehealth and Medical home concepts). Additionally, the "Employee Positivity Factor" could provide an additional source of return. Despite these encouraging reports, 40% of HWPs are considered to be ineffective.

The requirement of incentives to help effect behavioral change has been discussed and supported by many HWP experts. However, these incentives must require behaviors that are aligned with those that the enterprise desires to change. Having the employee record their diet as they eat is better aligned with the goal of a healthy diet than merely checking a box on a questionnaire if you consumed 3 portions of vegetables at least twice in the last week. The first motivates the individual to make better choices while eating and the second one encourages the individual to check a box.

A successful HWP is customized for an organization taking into account culture, long-term goals and strategy as well as strong executive and managerial buy-in. Behavioral change must be achieved in HWP participants and this requires incentives, secure and private participant data and convenient access to an engagement platform that aggregates the multiple facets of health (pharmaceutical adherence, biometric assessment of disease parameters, medication safety features, nutrition, exercise, challenges, behavioral modification techniques and inter-participant motivation) and involves the entire family unit.

The effective HWP must include multiple strategies to address the wide range of preexisting health engagement and motivate the individual to progress to higher levels of engagement. The only way to obtain behavioral change is through the participation and engagement of the individual and their family in the HWP. Thus the ideal user interface must address current non participant concerns. These concerns include limited access, inconvenience, lack of time and security concerns. These concerns would be addressed with a Mobile solution, HIPAA compliant hosting and data access controlled by the employee. Providing additional desired features such as account association of family members, a lifelong compendium of personal health information that is portable and can be maintained from organization to organization as well as personally are attractive to the individual.

