



Population Health Solutions

## **Essential Ways Corporate Programs Can Better Improve General Health and Reduce Medical Spend**

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Companies across the United States are attempting to improve employees' general health by encouraging participation in wellness programs. Leisure time physical activity has indeed improved because of wellness programs and trends in fitness trackers.<sup>1</sup> Vital Incite analysis has shown that while the benefits from increasing exercise frequency can cut medical spend,<sup>2</sup> other aspects of health that are generally lacking must also be addressed to substantially improve health and reduce medical costs. As they implement health and wellness programs, employers should also encourage muscle strengthening and more vigorous cardiovascular exercise activities, and emphasize proper nutrition.

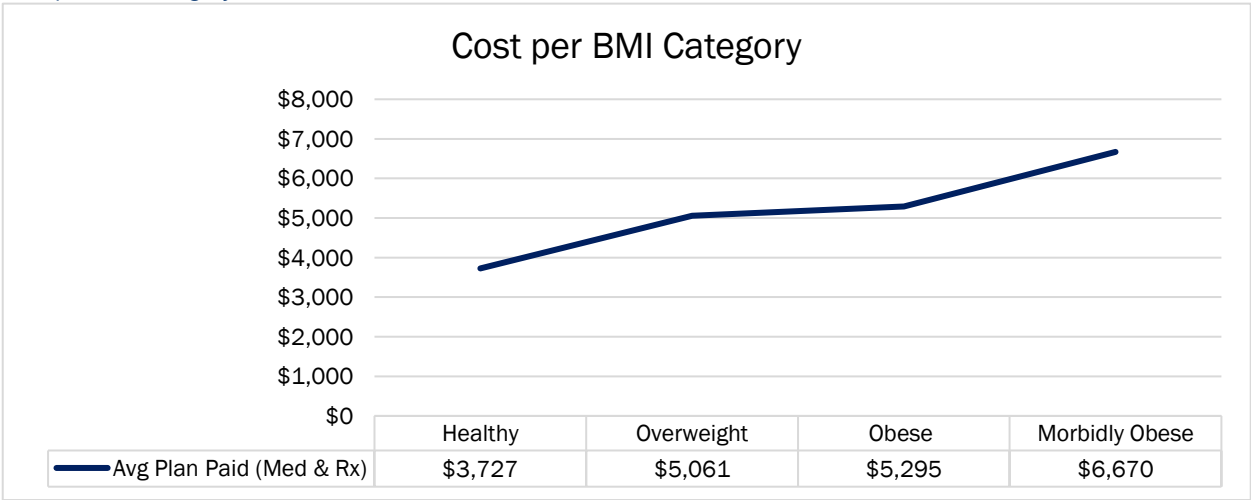
In 2016, over half of U.S. adults met the recommended physical activity guidelines for aerobic activity for the first time ever, according to the National Center for Health Statistics. However, only 21.7% met the guidelines for both aerobic and muscle strengthening activities.<sup>1</sup> Corporate use of fitness trackers has notably impacted physical activity, increasing overall movement. Employers should now further educate employees on the additional benefits of muscle building exercises, which burns calories more efficiently, protects joints from injury, and reduces risk for chronic disease.<sup>4</sup> Building lean muscle mass often leads to a reduction in body fat resulting in lasting health benefits. Muscle strengthening exercises can be performed with little or no equipment, with calisthenics and body weight resistance exercises such as push-ups, sit ups, and squats, being easy ways for employees to incorporate muscle strengthening into their exercise routines. In addition to promoting muscle building exercise, employers may also consider offering strength training or yoga classes to further educate their workforce. Increasing

the muscular strength of a company improves the general health of the population, ultimately reducing overall medical spend.

The statistic noted above regarding aerobic activity may have been overstated as the survey was self-reported and individuals may have not been aware of the moderate to vigorous intensity level required by the physical activity guidelines.<sup>3</sup> An individual can reach 10,000 steps on their fitness tracker in a day without even breaking a sweat. However, it is cardiovascular exercise, meaning exercise that significantly increases the heart rate to the point where it is difficult to talk, that decreases blood pressure and resting heart rate. Cardiovascular exercise helps the heart, and it also aids in improving memory, controlling blood sugar, reducing shortness of breath, improving weight maintenance, and decreasing stress and anxiety. To fully realize the benefits of cardiovascular exercise, it should be performed at least 30 minutes per day, 5 days a week. Employers can encourage more participation in moderate to vigorous exercise by allowing more flexible work hours to accommodate physical activity, subsidizing gym memberships, or by simply providing education.

Even though exercise in the U.S. is improving, the prevalence of obesity and diabetes continues to increase.<sup>1</sup> Vital Incite demonstrates, the cost of care has increased as individuals who are obese cost approximately \$1,500 more than someone maintaining a healthy weight.

Figure 1. Cost per BMI Category



Physical activity alone will not improve the health of a population; proper nutrition is also essential.

Kaiser Permanente, the largest managed-care organization in the country, goes so far as to recommend a plant-based diet regimen that encourages whole, plant-based foods and discourages meats, dairy products, and eggs as well as all refined and processed foods.<sup>5</sup> Further, Dexter Shurney, Chief Medical Director for Cummins, Inc. explains, “Employer wellness programs typically emphasize the physical fitness aspect of health, but miss the opportunity to educate employees about improving their health through proper nutrition. Cummins Inc. has taken steps to put into practice the science that links nutrition, including a whole-food plant-based approach, to better health. Fact-based nutrition is becoming a key element of our prevention, treatment, and disease reversal programs for common chronic health conditions like type-2 diabetes, cancer, and heart disease in its various forms.”

Proper nutrition is essential to general health, and while a plant-based diet may not be appropriate for everyone, encouraging all employees to make improvements in their diets is crucial. Employers can promote healthy eating in the workplace by making simple changes such as:

- a) offering a free fruit or vegetable day and including a healthy recipe on how the employee can prepare that food
- b) removing unhealthy sugar sweetened snacks and beverages from the vending machines and adding herbal teas, plant based crackers and healthy popcorn options
- c) providing more plant-based options in the company cafeteria, if applicable, or plant based catered lunch for meetings

Educating employees on the importance of proper nutrition and encouraging the consumption of more fruits and vegetables develops healthier habits within the company, leading to reduced risk for and possible reversal of chronic conditions for employees and their families.

Employers do not typically focus on healthy and low-risk members, however, those individuals will likely develop an increased risk over time. To best reduce medical spend, companies should better enable their healthy people to stay healthy by encouraging them to take a more holistic view of their health and incorporate muscle building exercises, cardiovascular aerobic activity, and most importantly, proper nutrition into daily activities. Based on a Resource Utilization Band (RUB) score, a score assigned to a member based upon John's Hopkins ACG Predictive Model, Vital Incite demonstrates that a healthy individual's medical spend is significantly less than those with increased risk. RUB scores are based upon age and gender, medication patterns, special population markers, resource use, disease markers, and overall disease burden. Table 1 demonstrates the cost difference for a higher risk individual on an annual basis.

*Table 1. Cost Per RUB PMPY*

Vital Incite Book of Business				
1	2	3	4	5
Healthy User	Low Risk	Moderate Risk	High Risk	Very High Risk
\$296.19	\$742.75	\$3,501.76	\$15,597.52	\$56,394.13

In conclusion, while there has been a successful effort to increase physical activity in corporate populations, companies can further improve general health and reduce medical costs by promoting muscle strengthening and cardiovascular exercise, and by emphasizing proper nutrition. All employees can benefit from improved wellness programs focusing on a more holistic approach to health, incorporating both education and activities that foster engagement and encourage healthy habits. Employers making thoughtful investments in these areas can help significantly improve the health of their workforce and better manage medical spend.

#### Sources

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