Recently, Steven Aldana, PhD, Professor of Health and Human Performance at Brigham Young University, sat down with WELCOA’s President David Hunnicutt, PhD, to talk about health promotion’s potential impact on the health status of the American workforce, and Corporate America’s bottom line. In this exclusive interview, you’ll learn about health promotion program outcomes, current health promotion theory including the Compression of Morbidity, as well as get an inside look at BYU’s attempt to address the health of its student body.
Topics Covered

Q1: How would you characterize the health status of the American worker?

Q2: Do you believe our decreasing health status is an issue of concern?

Q3: How important are health promotion programs to corporate America?

Q4: Should we be doing a better job helping CEOs understand the value of health promotion?

Q5: Can health promotion programs impact health status?

Q6: Can health promotion programs have a financial impact on healthcare costs?

Q7: What are the longer-term (10 years) benefits of health promotion programs?

Q8: What is the compression of morbidity and how does it work?

Q9: How strongly does the current literature support the theory of compression of morbidity?

Q10: What is the current state of the research on the financial impact of health promotion?

Q11: Do you believe that health promotion is a good investment for businesses to make?

Q12: Are you optimistic about the future of health promotion?
Q1: Steve, how would you characterize the health status of the American workforce?

ALDANA: You can’t go anywhere without seeing something about our health status—be it the obesity epidemic, diabetes, or our lack of physical fitness. We’ve discovered—in a recent survey of California CEO’s—that their perceptions of employee health differ markedly from those of us in health promotion. Most of these CEOs were aware that they had a few smokers, and that drinking was somewhat of a problem, but what we see as the most important issues—obesity, poor nutrition, and physical activity—were hardly even mentioned. We conducted this survey about a year ago, when economically, things were pretty tough. These companies were focused on bottom line profitability. Health promotion—or even employee health—wasn’t a concern for most of these companies. They were in survival mode, so health promotion was low on the list of priorities. And while most CEOs don’t perceive health status as a problem, the rest of us in the field know where we’re headed—and we’re all pretty worried.

Q2: It sounds as if you see our health status as an issue of great concern. Do you agree?

ALDANA: We’re headed down a very steep and slippery slope—our healthcare costs are straining us. And as long as healthcare costs continue taking bigger and bigger bites, we’ll keep wondering how we got into this mess to begin with. The data on obesity, diabetes, and other chronic diseases is our warning flag. We’ve reached a critical point and people are beginning to realize it.

Steve Aldana, PhD
Director of Health Promotion Programs, College of Health & Human Performance at Brigham Young University

Dr. Steven Aldana is a Professor in the College of Health and Human Performance at Brigham Young University where he is the Director of Graduate Programs. He has published over 50 scientific papers and three books on various health promotion topics. Currently he is a consultant for the National Institutes of Health, the National Cancer Institute, and the Centers for Disease Control and Prevention. He is also a senior research scientist with the Health Enhancement Research Organization where he is the principal investigator on several lifestyle trials and is actively involved in working to make health promotion an important part of the nation’s healthcare agenda. Dr. Aldana can be reached at steve_aldana@byu.edu.
Q3: With all of the cost-containment options available to employers, how important are health promotion programs to businesses in America today?

ALDANA: I’m probably not going to give the answer that many in health promotion want to hear. But it’s my opinion that most companies—not the larger ones, but in the smaller and medium sized companies—health promotion isn’t even on the radar. What is on their radars, however, is outsourcing their manufacturing to Mexico or China, repackaging their benefits to shift a larger portion of costs to employees, and so on. Those strategies have very a large and immediate impact on the bottom line. Health promotion can have some short-term impact in the areas of improved morale and productivity, absenteeism, and to some extent, healthcare costs. But for the most part, health promotion requires a longer time horizon. Within five, 10, 15, or 20 years, health promotion can create an enormous healthcare cost advantage. But here’s another problem, in five 10, 15, or 20 years, those same people won’t be there anymore. It’s too long of a time-frame for CEOs to be concerned about, and it’s just not part of their business plan—it’s not something they’re worried about. I’m going to say many really don’t care about employee health promotion programs or employee health.

Q4: Do you think apathy for health promotion is a legitimate feeling or do we need to do a better job helping CEOs understand the potential value of health promotion to their organizations?

ALDANA: When a CEO sees the amount of money they’ll save by sending their manufacturing to China versus using a large US metropolitan, unionized workforce, it’s a no-brainer. The savings are absolutely enormous for the company. That’s why they make the move, and why most of them are moving in that direction. There are, however, a number of emotional, moral, and ethical reasons not to do so. To answer your questions, the business world is primarily focused on the bottomline, and I don’t think it has anything to do with us not doing our best to educate CEOs. There are other business strategies that have more bite and are more important to the bottom line than health promotion right now. Now, this may change in five or 10 years when employees pay another 100% increase in healthcare costs. We’ll reach a critical point where average working Americans will no longer tolerate the cost of medical care.

Q5: If, as you just mentioned, companies do turn to health promotion in five or 10 years, can health promotion programs impact health status?

ALDANA: Absolutely, but there’s a huge gap between what we know from the scientific literature, and what most employees do. The large, randomized studies conducted today show some pretty promising results. In fact, in as little as six weeks, we’ve seen not only extremely large, short-term changes, but we’ve also seen changes system-wide. We see all kinds of positive changes taking place—...
improvements in cardiovascular health, or lost weight—a whole myriad of changes that occur for people taking part in health promotion programs and making lifestyle changes. So, do health promotion programs work? I have no doubt in my mind. The evidence is compelling; it’s not a question for debate.

“**So, do health promotion programs work?**

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**Q6:** If, as you just mentioned, health promotion programs can improve health, can they also have a financial impact on healthcare costs?

**ALDANA:** That’s a question we ask all the time. In one or two years of healthy living, there’s not a whole lot of change in the status of things like cardiovascular disease, cancer or diabetes, but they can be dramatically prevented long-term. In fact, 91% of all diabetes cases, 80 to 90% of all heart attacks, and anywhere from 30 to 70% of all cancers can be prevented completely through lifestyle changes. In the short term, say one or two years, we just don’t see big enough changes. So, for the impatient business executive who wants immediate, bottom line changes in healthcare costs, I don’t believe there’s enough evidence, unless it’s something like a seatbelt program or vaccination program that have a fairly direct impact, say within six months to a year. But for most health promotion programs, changes come with the passage of time, and often, much time is needed before diseases are prevented. Health promotion is a long-term investment, and that frightens many business people away.

**Q7:** Is it fair to say that within 10 years of putting a health promotion program in place, there could be substantial benefits for an organization?

**ALDANA:** There’s one caveat with that notion—employee turnover. Turnover averages 11% in America; this means that 11% of a company’s employees will leave in any given year. In a 10-year horizon, a company has theoretically replaced most of its workforce. So the people participating in the company’s fabulous health promotion program are now working for somebody else, and that somebody else will be the one to reap the benefits of that healthy employee—that is unless the first company’s new hires come from other companies that also have health promotion programs in place. If other companies are involved in health promotion, and employees move between these companies, then all ships rise. If there are a few stellar corporations with healthy employees leaving regularly, they’re not going to reap much of the benefit. Here is where policy comes into place. There needs to be a
nationwide or statewide policy that encourages and incentivizes worksite health promotion programs so that all ships can provide programs for all employees, and regardless of where they go, all ships rise.

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Q8. When we take a look at corporate health promotion programs, this whole notion of the compression of morbidity comes to mind. Can you tell us a little bit about the compression of morbidity, and what it is?

ALDANA: The compression of morbidity addresses the relationship between lifestyle habits and the timeframe between chronic illness and death. In a typical life, individuals experience good and poor health. Later in life they experience a significant event—a broken hip, cancer, a first bypass, a stroke—at which point the quality of life and health status declines dramatically until the point of death, which typically occurs a few years later.

Compression of morbidity suggests that if a person improves their health behaviors, they'll live longer. If lifespan is extended, what happens, in terms of health, over the course of that person's life? That person may experience the onset of major disability and then live longer, but disabled, until they die. This is actually known as the expansion of morbidity, and it's not a great scenario because it suggests additional years of life are of poor quality.

On the other side of the coin is the compression of morbidity. This suggests that we live longer, reach a point in time where we have a major disabling event like before, but in this case, it happens much later in life and closer to the end of life.

To illustrate, I like to tell people that I'm going to live to be 94 years old and be snowboarding with my great-grandchildren when I hit a tree and die. I extended life by making positive lifestyle choices; lived a higher quality of life; and then experienced a major event and I died. Basically, I compressed morbidity into just a few seconds. Though it's somewhat of an extreme case, it's basically how the compression of morbidity works.

We live high-quality lives into our 80s, 90s, or maybe beyond; we have our first major event; and within a few years we're dead. That's the compression of morbidity: we squeeze that end of life illness period into a much shorter time close to death after a long, healthy life.
Q9: How strongly does the current literature and research support the compression of morbidity?

ALDANA: The current literature makes a strong case for the compression of morbidity. From the research, we’ve learned that the first major health event can be delayed by seven to 13 years.

We also know that living a healthy lifestyle can extend a person’s life anywhere from 10 to 20 years. We don’t have the correct studies to document the theory perfectly, however, we have a great deal of evidence that suggests compression is happening.

We’ve also discovered that the avoidance of disease and the improvement of a person’s quality of life and health status occur almost immediately for people making lifestyle changes.

This means that if I start eating better and exercising today, in only the next several weeks or months, my health status is going to improve, along with the quality of my life. It’s almost an immediate change. Let that play out over a lifetime, and you delay chronic events like a heart attack or stroke, until you’re close to death, which is in the distant future. So behavior modification delays chronic events, giving us 10 or 20 years of high quality living.

Q10: Steve, you’ve played a significant role in a number of financial outcomes studies of health promotion programs. Tell us about the current state of research on the financial impact of health promotion.

ALDANA: There has been very little research published since the American Journal of Health Promotion’s special issue on the financial impact of health promotion—only a half dozen papers or so. And of the papers published, most conducted cost-benefit ratios that resulted in approximately $1 spent for every $3 to 5 saved—somewhere in that range.

Some of them show that about 24 to 25% of all healthcare costs are lifestyle related. We know that of the health care costs a company has in any given
"In the next 10 to 20 years, businesses are going to see that productivity suffers with unhealthy employees, and that healthcare costs may prevent them from becoming the corporation that they want to become."

year, about 25% of that is due to the way that people live their lives. Now, extend that timeframe out to about 10 or 20 years and that portion of lifestyle-related costs gets a little larger. But it also suggests that 75% of healthcare costs are explained by factors other than lifestyle, such as accidents, certain cancers, or childbirth. These factors are very difficult to study. Though they are very rough figures, they all support the notion that health risks increase healthcare costs; that health promotion programs have an impact on employee health, which, in turn, impacts cost. The problem is, however, that when you weigh the health promotion option against the option of taking your manufacturing to Taiwan, they pale in comparison. But there are benefits.

Q11: We’ve talked some about corporate America’s view of health promotion, and we know that its outlook is somewhat negative. Do you believe that health promotion a good investment for a company to make?

ALDANA: Health promotion is, indeed, a good investment for a company to make. What we’ve found from the companies that we interviewed is that some of them are in a survival mode. They are concerned about nothing more or less than surviving the next quarter or the next two years. That’s where many companies are right now. They have absolutely no interest in employee health promotion programs, and they’re not going to until things get better economically.

Companies that are more flush with cash and a little larger, have a greater capacity to do health promotion. In the next 10 to 20 years, that viewpoint will change. They’re going to see that productivity suffers with unhealthy employees, that healthcare costs may prevent them from becoming the corporation that they want to become, that their employees are their most valuable asset, and that they’ve got to give them more attention than simply using ‘em up, burning ‘em up, retiring ‘em out, and moving them on. It has to change because our health status is going to be worse than it already is.
Healthy U

Getting And Keeping BYU Students Healthy

Home to some 30,000 students, Brigham Young University takes an active role in improving the health and well-being of its student population. “We want our students to live long lives, full of service to their families, communities, and the world,” said Aldana about the University’s concern for student health.

One Semester To Better Health

Right now, students can participate in a general education course designed to teach them about the importance of nutrition, physical activity, chronic diseases, and the processes by which those diseases develop. The class gives students strategies for changing health behaviors.

Meeting once a week, students hear from top physicians, document personal physical activity and nutrition habits, attend workshops, take shopping tours, and participate in peer discussion groups and demonstrations. “The whole purpose of the class is to teach individuals why certain diseases occur and how changing certain behaviors can prevent them from occurring in the first place,” said Aldana.

The Next Level

Capitalizing on the fact that the earlier in life someone makes positive lifestyle changes, the longer they’ll live, BYU is taking student health to the next level. Beginning in the fall of 2004, all of BYU’s students will be required to take the University’s Healthy Living course, a lifestyle modification class focused extensively on diet and exercise. “It’s part of the university’s general education requirements,” said Aldana. “This is a big investment for the University, and we’re excited to see how it improves the health of our students.”

With evidence of the declining American health status and the challenges that lay before us, are you optimistic about the future of health promotion?

ALDANA: I’m more optimistic now than I’ve ever been in the past. Five or 10 years ago, we had our meetings and our conferences, and we’d publish our data, but nobody really cared much. And not only didn’t they care, but they also had no idea what we did in health promotion. There was no interest. But we could see the wave coming. Now all of a sudden things have changed. Take obesity for instance. You can’t escape it; and it’s not going to go away. But we’re here, and here to stay. More and more federal dollars are being freed up, allowing us to do more things. There’s more interest from the public. People are becoming aware of the science that we’ve had for quite a while now, and our science base continues to grow. Every day I read a dozen or two articles in an attempt to keep up with what’s coming down the pipe. We’re finally getting to the point where people want to hear the information.

In looking at the future, we’ve got to find ways to communicate like WEL-COA does in getting our knowledge base to the right people at the right place. And that’s only going to become more important in the future. In the next 10 to 20 years, I can’t think of a more secure position or profession than healthy lifestyles and helping people improve their health—it’s going to be even more important in the future. And we have the answers if people will listen, and they’re beginning to.
ABOUT THE WELLNESS COUNCILS OF AMERICA

The Wellness Councils of America is one of North America’s most trusted voices on the topic of worksite wellness. With over a decade of experience, WELCOA is widely recognized and highly regarded for its innovative approach to worksite wellness. Indeed, through their internationally recognized “Well Workplace” awards initiative, WELCOA has helped hundreds of companies transform their corporate cultures and improve the health and well-being of their most valuable asset—their employees.

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