



Moving the needle on obesity

What organizations are doing to help people lose weight

JAN 25, 2016 | BY KEVIN BINGHAM, TODD WHITTHORNE

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Recently, we've seen a lot of exciting movement in the fight against **obesity**.

A few years ago, we shared the cost of America's epidemic rates of obesity, the impact on children who develop Type 2 diabetes before the age of 15, and the burden obesity is placing on employers (e.g., increasing durations of injury, rising medical costs, and expanding lost-time claims) in the January/February 2013 Contingencies Magazine article titled Tipping the Scales: The Burden of Obesity on Workforce Wellness.

Read: U.S. obesity rate continues to climb

We also touched upon employer efforts to encourage workers to choose healthier lifestyles and provided a case study on the dividends of a successful wellness program.

In the three years that have passed since writing the article, we'd like to share some developments that help illustrate how organizations are attempting to move the needle.

American Medical Association (AMA): Obesity is a disease

Obesity has a far-ranging negative impact on health.



Each year obesity-related conditions cost over \$150 billion dollars and cause an estimated 300,000 premature deaths in the United States.ⁱ Some of the health effects associated with obesity include:

- type 2 diabetes
- high blood pressure
- cardiovascular disease
- joint problems including
- osteoarthritis
- cancer
- sleep apnea
- respiratory problems

These health effects make it more challenging for workers compensation insurers and the physicians treating obese injured workers because patient panels are less healthy, exhibit more surgical complications, experience increased pressure on patient joints, and ultimately take longer to recover after treatment.

In June 2013, the AMA voted to recognize obesity as a disease.

In a press release, AMA board member Patrice Harris, M.D. stated: “Recognizing obesity as a disease will help change the way the medical community tackles this complex issue that affects approximately one in three Americans.”ⁱⁱ

There is no doubt that we are early in the transformation of office practices so that physicians can help patients fight obesity.

Before the AMA vote, one survey noted that almost 90 percent of doctors said it was their responsibility to help patients lose weight, but 72 percent of the doctors said that no one in their practice had been trained to deal with obesity and weight-related issues.ⁱⁱⁱ

We have all seen the late night infomercials, social media pop-up ads, and books describing a plethora of weight loss “strategies”. Although the journey may take some time for doctors and office practices to hone in on the most effective weight loss strategies, recognizing obesity as a disease is an important step.

The physical exam, which often time focuses on items such as screening for diseases, updating vaccinations, exam of systems (e.g., cardiovascular, respiratory, neurological, etc.) and assessing future medical problems, will hopefully place more emphasis on lifestyle changes that reduce the incidence of childhood and adult obesity.

Obesity organization: Getting the word out

Similar to fights we have seen against other epidemics, there are a number of organizations and universities taking the lead in the battle against obesity.



The Obesity Medicine Association is one of the largest organizations of physicians, nurse practitioners, physician assistants, residents and students working to advance the practice of obesity medicine and the treatment of patients affected by obesity.^{iv} As noted on their website, they promote the development of individualized plans focusing on four key pillars: nutrition, physical activity, behavior and medication.

The American Board of Obesity Medicine currently maintains the standards for assessment and credentialing of physicians. Their website has textbooks, articles, journals, and a link to numerous websites invested in the battle against obesity.^v

In 2015, The Obesity Society, the Obesity Action Coalition, Strategies to Overcome and Prevent Obesity Alliance and the American Society for Metabolic and Bariatric Surgery launched National Obesity Care Week.^{vi}

Held the first week of November, the [Care Week website](#) highlights a number of strategies that can be used to fight obesity such as intensive behavioral treatment, behavior modification (e.g., exercise, diet/meal replacement, support groups), weight-management products and programs, physician-supervised weight management, and more.

The collaboration is focused on making a difference by generating broad awareness of the complexity of obesity as a disease and educating healthcare professionals and patients about treating the disease.

Grocers, health insurers, wearable makers: Data, nudges, and technology

The convergence of big data, advanced analytics, and an evolving understanding of habits and how to change human behavior through data enhanced “nudges” is quickly changing the way the world addresses obesity.

In September of 2014, Tesco, Diabetes UK and the British Heart Foundation joined forces to promote healthy living. Tesco has been leveraging loyalty card data to see what their customers are eating and offering healthier choices to customers who participate.

As CEO Phil Clarke noted, “Our customers have told us they’d like help in choosing healthy options, so on an individual level, we want to see whether customers would welcome tailored suggestions for how they could shop more healthy.”^{vii}

In February of 2015, FierceHealthPayor wrote about a number of health insurers who are partnering with grocery stores to help keep their members healthy.^{viii}

Similar to Tesco, U.S. health insurers recognize that working with grocery stores to help create special member programs and discounts targeted at healthier food choices positively impacts member health. Gentle nudges, leveraging discounts during the shopping experience, can help alter customer shopping habits for the better.

As the article noted, a major U.S. health insurer introduced a healthy food program over three years ago where 40 percent of members have enrolled in the program.



The insurer offers a 10 percent savings to its participating members who use a card to buy certain qualifying foods at select grocery stores.

The program is part of the health insurer's larger bet on "lifestyle medicine," which includes a focus on nutrition and healthy eating as a way to treat chronic conditions.

With the surge in wearables and health apps focused on running, cycling, step measurement and calorie tracking, the benefits continue to emerge.

As the 400 employee Appirio found out, leveraging wearable technology can save the company a lot of money. After handing out fitness trackers to all of its employees as part of a corporate wellness program coined CloudFit, the company was able to convince its insurance company to lower its rates by 5%.^{ix}

In another article, it was noted that a global energy company provided fitness trackers to 14,000 employees, 6,000 spouses and 4,000 retirees as part of a wellness program focused on lowering health care costs.^x

As Cigna spokesperson Joe Mondy noted, the right "consumer-oriented product" could result in a 13% year-over-year decline in the amount insurers charge employers based on their workers' risk profiles.

As authors who leverage wearable technology and various apps to track their own physical activity, there is no doubt that we are walking more at airports and taking the stairs instead of the elevator!

With the constant evolution of wearable technology (e.g., wearable skin patches from Gentag), increasing sophistication data analytics (e.g., steps, calories burned, sleeping patterns, goals achieved), and nudges being sent to your PDA (e.g., eating tips, steps relative to friends, etc.), we now have a multitude of tools to help support healthy behavior.

On the more cautious side, one should always watch out for how human beliefs, decision-making and commitment are impacted by behavioral biases.

Wearables suffer from a number of biases including the Novelty Effect, which is the tendency for performance to improve when new technology is introduced driven by excitement, ultimately followed by a drop off in interest as the excitement wanes.

This can be observed in research performed by Endeavour Partners which indicates "over half of U.S. consumers who have owned a modern activity tracker no longer use it and a third of consumers who have owned one stopped using the device within six months of receiving it."^{xi}

Wearable technologies have also been impacted by the Hawthorne Effect, where individuals improve their behavior while being observed by others.



From the authors' personal experience, we remember the early days of using our trackers when dozens of our friends' steps and workouts were shared throughout the day. On a number of occasions, we were motivated to take a few more steps to "compete" with our friends.

However, as the Endeavour Partners research illustrates, some of this peer-to-peer step contagion decreased as the number of our friends using their wearable technology declined.

Although we are optimistic about the benefit, only time will tell if wearables create sustained health improvements or temporary success stories.

Healthy Living Catching On

All across the country, fitness seems to be more in vogue than ever. From local mom & pop restaurants to national chains, restaurants are becoming more health conscious.

The 80's push to super-size every meal has been slowly replaced with healthier food, custom salad options and menus loaded with calorie count information.

In November 2014, the Food and Drug Administration (FDA) announced calorie labeling requirements for restaurants, vending machines and even the popcorn we eat at the movie theatres.^{xii}

In September 2015, Dr. Susan Mayne, the Director of the Center for Food Safety and Applied Nutrition issued a draft guidance document aimed at helping companies comply with the menu labeling final rule effective December 1, 2016.

From pizza and hot dogs to muffins and ice cream, chains with 20 or more locations doing business under the same name will be required to list calorie information for standard items on menus and menu boards.

Although the New York Court of Appeals rejected the soda ban promoted by former Mayor Michael Bloomberg, his effort to encourage healthier living through moderation lives on. Some of us may not agree with restricting soda sizes, but we all appreciate the need to moderate the intake of certain high sugar items.

As the article titled **Soda: Public Health Enemy No. 1** noted, if everything else in a consumer's diet is equal, a person who has a can of cola a day "adds an extra 14.5 pounds per year, just from the calories alone."^{xiii}

The First Lady Michelle Obama has also been actively pushing America to raise a healthier generation of kids through [Let's Move](#). Focusing on the epidemic of childhood obesity, the take action section of the website helps parents, schools, community leaders, health care providers and children take a number of simple steps to help solve childhood obesity.

As an example, the site recommends kids take 5 simple steps: move every day, try new fruits & veggies, drink lots of water, do jumping jacks to break up TV time, and help make dinner.



The list may sound straightforward, but sometimes effortless reminders are the only way to get our children away from the sedentary lifestyle of playing video games and texting on their PDAs.

Employee Wellness

Nationally more and more companies are realizing that much of their healthcare spend is related to preventable conditions (e.g., heart disease, cancer, musculoskeletal, diabetes) and as result are offering employee “wellness programs.”

There is a huge variance as to what is included in these initiatives but the options generally fall into two categories, cultural and clinical.

Cultural programs include lunch & learns, challenges (often involving physical activity, hydration, fruit and vegetable consumption, etc.), participation in local events (Fun Runs, 5K's, etc.), and bio-metric screenings as part of a “know your numbers” campaign.

These offerings are usually voluntary and may or may not have any incentives/disincentives attached. Any measurable outcomes are often linked to participation only.

Cultural wellness programs are helpful in developing a positive employee morale but usually don't have much impact on slowing the progression of disease within organizations.

In sharp contrast, clinical wellness programs focus on specific interventions to *measurably* impact the risk factors associated with preventable disease.

The Patient Protection and Affordable Care Act allows for companies to “tier” employee premium contributions by 30% based on certain risk factors including body mass index, blood pressure, cholesterol, etc. There's a 50% variance allowed for tobacco use.

Strategically linking personal health risk factors to benefit design, when done properly, can result in significant improvement in the overall health of an organization.

Obesity, along with physical inactivity, is often the driving force behind the preventable conditions mentioned above.

When individuals lose weight, as little as 3-5%, and improve their fitness level, they often experience dramatic improvement in the risk factors associated with metabolic syndrome, a clustering of risk factors which dramatically increase risk of disease.^{xiv}

The metabolic syndrome risk factors include waist circumference, triglycerides, HDL cholesterol, blood pressure, and glucose.



Individuals with at least three of the five risk factors out of range are at a much greater risk for heart disease, stroke, and in particular type II diabetes.

Metabolic Syndrome risk factors:

<u>Risk Factor</u>	<u>Men</u>	<u>Women</u>
Waist circumference	>40"	>35"
Tryglycerides	>150 mg/dL	>150 mg/dL
HDL Cholesterol	<40 mg/dL	<50 mg/dL
Blood pressure	>130/85 mmHg	>130/85 mmHg
Blood glucose/sugar	>100 mg/dL	>100 mg/dL

“The important thing to remember about the metabolic syndrome risk factors is that they are intimately related, and when one starts to go bad they all start to go bad. That’s why metabolic syndrome is such a great predictor, an early sign, of type II diabetes. More importantly, they can all be improved with just a little bit of weight loss and some improvements in physical activity levels.”

Tim Church, M.D., M.P.H., Ph.D., Chief Medical Officer, ACAP Health Consulting

From an employer standpoint diabetes is of particular concern.

The latest available data from 2012 show that 28.9 million or 12.3% of American adults are currently diabetic.

Based on fasting glucose or A1C levels, another 86 million or 37% of U.S. adults aged 20 years or older have prediabetes.

With 90% of pre-diabetics unaware of their risk, the stakes are enormous.^{xv} Of even greater concern, researchers now predict that, for those born after 2000, 40-50% will develop diabetes at some point in their lifetime.^{xvi}

Type II diabetes, which accounts for over 95% of all diabetes, is primarily a result of obesity and physical inactivity.^{xvii} In other words, in the vast majority of cases, this is a preventable disease.

Besides the adverse medical impact of diabetes, which includes increased risk of blindness, amputation, neuropathy, etc., the economic impact is also significant.

According to The American Diabetes Association, healthcare costs for those living with the disease average 2.3x more than someone without diabetes.^{xviii}

More recently, the Health Care Cost Institute published a report, based on 2013 data, that the annual expenditure for insureds without diabetes was \$4,305 compared to \$14,999 for those with the disease. This is an unsustainable trend since there are over 4,600 Americans *every day* that convert to diabetes.^{xix}



Obviously, finding a way to slow, stop, or reverse the conversion of pre-diabetes to diabetes makes sound economic sense.

Since 2007 ACAP Health has offered a program through employers that helps employees and spouses lose weight and reduce the incidence of metabolic syndrome.

Naturally Slim is a mindful eating curriculum that emphasizes skill building and is delivered through a distance-learning platform. On average, participants lose over 10 lbs. after 10 weeks (9.4 lbs. for women, 13.2 lbs. for men) and of equal importance, reduce the incidence of metabolic syndrome by 50%.

Results of this program were recently published in the journal, *Metabolic Syndrome and Related Disorders*.^{xx}

Often times, employees that lose weight and improve their metabolic syndrome risk factors qualify for reduced healthcare premiums.

This is an example of a clinical wellness program where incentives, or disincentives, are tied to results rather than participation. Measurably improving the risk factors associated with costly diseases, like diabetes, is a sound strategy for organizations of all sizes.

Keep moving in the right direction

There is no doubt that we are still at a tipping point. However, the above efforts are beginning to give us a little breathing room.

From Tough Mudders and cross fit workouts, to clinical wellness programs and obesity being labeled a disease, we believe the country is moving in the right direction.

As the Chinese philosopher Laozi one said, “A journey of a thousand miles begins with a single step.”

We think the above examples represent more than a single step, maybe even a light jog towards moving the needle on obesity.

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