



The New Discipline of Workforce Wellness

Enhancing Corporate Performance by Tackling Chronic Disease

In partnership with
The Boston Consulting Group

The views expressed in this publication do not necessarily reflect the views of the World Economic Forum.

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Executive Summary

- **Chronic illnesses exact a heavy toll on businesses, budgets and economies.** They account for the lion's share of healthcare costs in developed markets and, increasingly, emerging markets. They have an even greater impact on productivity, through increased absenteeism and presenteeism. Globally, the toll from chronic disease due to four risk factors is estimated at US\$ 2 trillion in lost productivity each year.
- **The business benefits of addressing wellness are substantial.** US companies that target just three major risk factors – modifiable employee behaviours that contribute to chronic disease – can save an average of US\$ 700 per employee each year in healthcare costs and productivity improvements.¹ The savings in Europe are closer to € 400 per employee, due to different healthcare and compensation patterns. In Asia, the average potential savings per employee are much lower, but the proportional impact of a wellness programme on company performance can be just as heavy. In many parts of the world, companies do not benefit directly from savings in healthcare (due to out-of-pocket or public funding), but the productivity gains are available to all.
- **To date, however, the economic impact of employee wellness programmes has been limited.** Many companies have taken steps to reduce the prevalence or severity of chronic illness among employees, but their efforts have typically been narrowly defined, often focusing on the most conspicuous drivers of a specific disease – a company might introduce healthy foods in its cafeteria in an effort to fight obesity, for example, or provide incentives for employees to stop smoking. Few companies have developed a systematic programme for improving employee wellness. In the absence of well-defined metrics, it has been difficult to develop a convincing business case.
- **Companies are poised to engage in a second wave of wellness programmes.** The emerging generation of wellness programmes is based on a more scientific understanding of the impact of behaviours on chronic conditions, as well as the effectiveness of interventions to address them. This sets the stage for companies to develop programmes that have measurable ROIs. To illustrate and facilitate this process, the World Economic Forum and The Boston Consulting Group (BCG), with the support of Healthways, have developed an online tool, the Wellness App. It simulates the interplay among risk factors, chronic illnesses and specific interventions, along with their implications for healthcare costs and potential productivity savings.
- **A wellness programme must be supported by an integrated approach.** Analytics, while essential, do not ensure success. An effective wellness programme should have three key characteristics: it should be based on robust analytics; it should be guided by a strategic vision and deep corporate engagement; and it should comprise a portfolio of activities focusing on individuals and their environment, both at the workplace and beyond.
- **A company's plan for improving wellness will depend on its starting point.** Companies that are interested in wellness are poised to take a few simple but effective actions. Companies that are engaged in wellness are learning from their experiences, striving to identify and target risk factors more accurately, and winning over key decision-makers. Companies that are getting sophisticated about wellness are already seeing a modest rise in productivity as well as a fall in per capita healthcare costs. The few companies that are integrating wellness into core business systems are constantly refining and tracking metrics for use in business and strategic decisions.

¹ The figure was calculated using a comprehensive simulation model developed by Healthways. Using this model, an average US company profile was assumed that incorporated a comprehensive wellness programme with three sample interventions at a total cost of US\$ 8 per employee per month. It was also assumed that the US employer covers 100% of the healthcare costs. See <http://wellness.weforum.org> for a complete list of assumptions and further details.

Preface

The impact of chronic illnesses does not show up explicitly on a company's balance sheet. And yet, these illnesses, which are becoming more prevalent in almost all workforces throughout the world, impose a heavy cost burden on companies, not to mention individuals, public budgets, and local and national economies. By confronting the problem of chronic illness systematically, organizations can generate substantial benefits – in the form of increased productivity and lower healthcare costs – and set in motion positive changes that will reverberate well beyond the workplace.

Over the past year, The Boston Consulting Group, building on work previously conducted with Healthways² and with its support, has been collaborating with the World Economic Forum to:

- *Build the business case for improving wellness.* The project set out to link bottom-line impacts (lost productivity and higher healthcare costs) to chronic disease; chronic disease to modifiable behaviours; and behaviours to interventions. A company should then be able to measure the return on investment (ROI) of a wellness programme in the same way it would measure the ROI of, say, an initiative to upgrade its IT system.
- *Develop a comprehensive approach for addressing chronic disease.* Establishing a better grasp of the cause and effect of a chronic disease is only the first step towards developing a results-oriented wellness programme. Success hinges on a number of factors, including solid analytics, corporate engagement and a portfolio of activities that both modify employee behaviour and create an environment that reinforces these changes.

This paper is based on the project's findings to date. Supporting materials – along with the Wellness App, can be accessed at <http://wellness.weforum.org>.

This project is one of several initiatives aimed at bringing greater rigor and evidence to the area of employee wellness. For example, the Public Health Foundation in India and the Business Action in Health Leadership Team through Business in the Community in the United Kingdom have taken important steps in this direction. In the United States, Dee Eddington has pioneered work in this area for several years, and is currently guiding a programme at the US National Business Group on Health. Moreover, several companies, such as Healthways, are building businesses around workplace wellness solutions.

Taking a More Sophisticated Approach to Improving Wellness

Chronic illnesses exact a heavy toll on businesses. It is well documented – in prior Forum reports as well as industry studies – that chronic disease accounts for the lion's share of healthcare costs in developed markets and, increasingly, emerging markets. Less emphasized is the fact that chronic disease has a significant impact on employee productivity, through increased absenteeism and presenteeism – underperformance due to illness.

The aggregate costs are staggering. In the United States, the top seven chronic ailments are responsible for an estimated annual shortfall of US\$ 1 trillion in productivity. Globally, four risk factors are estimated to cost US\$ 2 trillion in lost productivity each year.³ To make matters worse, chronic illnesses are actually becoming more prevalent in almost all countries, both developed and developing.⁴

It follows, then, that the business benefits of addressing wellness are substantial. US companies that target just three major risk factors – modifiable employee behaviours that contribute to chronic disease – on average can save US\$ 700 per employee each year in healthcare costs and productivity improvements.⁵ The savings in Europe are on average closer to € 400 per employee, due to different healthcare and compensation patterns. In Asia, the average expense per employee is much lower, but the proportional impact of a wellness programme on company performance can be just as heavy. In many parts of the world, companies do not benefit directly from savings in healthcare (due to public funding), but the productivity gains, which account for as much as three-quarters of the opportunity, are available to all.

The First Wave: Narrowly Defined Initiatives

Over the past two decades, many companies have responded to the growing costs of chronic illness by incorporating wellness initiatives into their employee health programmes. They have come to view this as a problem to confront rather than simply accept; the most forward-thinking companies see it as an opportunity to increase productivity and lower healthcare costs. (See the sidebar “Making a Vital Difference”.)

Most wellness initiatives, however, are still based more on experimentation than on a systematic approach. It is not always clear how the decision was made to intervene against one or many risk factors, or what the longer term expectations are, say, three to five years out. The absence of well-defined metrics makes it hard to calculate the ROI. “Our programme has yielded positive results,” remarked the leader of a wellness initiative at an Indian subsidiary of a global food company, “although we still don't know what the ROI is.” While people who study this issue have suggested that wellness programmes can generate returns that are two to six times their cost, few companies have been able to measure the impact of such investments in a standardized and systematic fashion.

3 2009 Almanac of chronic disease, Partnership to Fight Chronic Disease, 2009. There are multiple published studies that estimate the cost of chronic illness on productivity can be two to four times the healthcare cost. See, for example, Loepke, et al., “Health and productivity as a business strategy,” *Journal of Occupational and Environmental Medicine* 49 (2007): 712–721; and Controlling presenteeism, Kaiser Permanente, March 2007. WHO data, BCG Analysis.

4 Preventing chronic disease: A vital investment, Geneva, WHO, 2005. Facts related to chronic disease, Geneva, WHO, 2009.

5 The figure was calculated using a comprehensive simulation model developed by Healthways. Using this model, an average US company profile was assumed that incorporated a comprehensive wellness programme with three sample interventions at a total cost of US\$ 8 per employee per month. It was also assumed that the US employer covers 100% of the healthcare costs. See <http://wellness.weforum.org> for a complete list of assumptions and further details.

The lack of metrics also makes it hard for companies to prioritize the right interventions. As a result, companies tend to focus on the most obvious behaviours – for example, by paying for gym memberships to combat obesity and improve cardiovascular health. Left unanswered is whether an alternative approach could have produced a more powerful outcome – in terms of better productivity or lower healthcare costs – had it zeroed in on other behaviours or illnesses.

Wellness programmes also tend to lack follow-up. They are often managed as an “employee benefit” by the human resources (HR) function and not well integrated into a firm’s operations and its corporate culture. Many are the result of government directives or are copies of initiatives implemented by other organizations. Once established, they are often forgotten by senior management. With few exceptions, the subject does not rank high on the corporate strategic agenda.⁶

Making a Vital Difference

Hindustan Unilever – Unilever’s Indian subsidiary – launched its Vitality Initiative in 2006.⁷ Under this programme, employees are assigned a biometric grading based on their body mass index (BMI), blood pressure, cholesterol level and sugar fasting. There are three grades: green, indicating excellent health; orange, indicating the need for periodic reviews; and red, indicating the need for both focused attention and periodic reviews. Low-cost interventions are offered to people in the orange or red categories.

The results have been encouraging. About 14,000 employees have participated. Over half of the original “red” employees have moved out of the danger zone, while a survey found a widespread boost in morale among participants at all grades.⁸

Some well-established programmes have shown more tangible results. Pioneer Natural Resources in Irving, Texas, launched a programme of physical activity, stress management, weight control and lower-back care. Nine years later, the number of annual medical claims had declined by 50%.⁹ Jurong Shipyard, in Singapore, developed a comprehensive wellness programme that involved regular health screening. The programme helped reduce employee medical costs by an average of 33% over seven years.¹⁰

6 A survey conducted by Buck Consultants in October 2008 found that line managers were “very involved” in the development of a wellness programme in only 5% of cases, while the HR or benefits staff were very involved in 78% of the cases.

7 Copyright in India, HUL-5269-COL dt.16/6/2009.

8 Based on the Vitality Initiative Presentation by Dr. T. Rajgopal, vice-president (Medical and Occupational Health) of Hindustan Unilever, at the World Economic Forum Wellness Private session, New Delhi, India, November 2009.

9 “Corporate wellness,” T. Boone Pickens: His Life, His Legacy (BP Capital, 2009), <http://www.boonepickens.com/health/default.asp>.

10 Daipi, Hawazi, “Stay healthy, detect and treat diseases early.” Speech representing the Ministry of Health, Singapore, 10 February 2009.

The Second Wave: An Integrated Approach to Wellness

A new wave of workforce wellness is beginning to emerge, owing to three developments:

- The connection between modifiable behaviours and illnesses has come into sharper focus, due to the accumulation of both empirical evidence and scientific studies. For the same reasons, the links among chronic illnesses have also become clearer.
- Companies have become better at measuring the impact of interventions, in part because these actions have had time to play out, but also because companies are working to standardize metrics. In addition, companies are increasingly willing to share the results of their wellness initiatives.
- Companies at the forefront of managing wellness have recognized the strategic value of addressing the behaviours that lead to – or aggravate – chronic illness. They understand that they pay for these illnesses, sometimes directly (through healthcare costs) but more often indirectly (through lower productivity, which stems from absenteeism and presenteeism). For these companies, wellness is not just an HR topic but rather a strategic initiative that will have an impact on the bottom line.

This new wave will involve powerful analytics and a far more disciplined, coordinated approach to dealing with chronic illness in the workplace. The most advanced wellness programmes will include a portfolio of targeted initiatives – prioritized according to their impact on productivity and costs – and will vie for funding and time alongside other business investments.

The second wave has the potential to sweep across industry quickly, similar to how the “green movement” overcame boardroom resistance, gathered momentum, and drove the necessary technological solutions. Sure enough, companies are finding that sustainability practices can actually lower costs. And customers like it. Companies such as Wal-Mart now cultivate it as a source of competitive advantage.

But before executives can commit to comprehensive wellness programmes, they want to see a convincing business case that answers several questions: How can we measure wellness within our workforce? What are the drivers of the price of healthcare and lost productivity in our organization? When and how should we best intervene? How much would it cost to make those interventions – as well as not to make them?

The answers to these questions lie at the intersection of chronic illnesses, modifiable employee behaviours and targeted interventions.



Understanding the Link between Illness, Behaviours and Interventions

The Medical Expenditure Panel Survey (MEPS) database provides a standardized assessment of the medical cost associated with each major chronic condition in the United States.¹¹ Rich, aggregated data is available in several European and Asian countries, but only for some chronic conditions. For other conditions, there is often a lack of standardized, consolidated data.^{12 and 13}

The burden imposed by chronic disease is driven by a small set of conditions and risk factors. The 15 most costly conditions account for more than 80% of the total cost of all chronic illnesses. They are: diabetes, coronary artery disease (CAD), hypertension, dyslipidemia, obesity, cancer, asthma, arthritis, allergies, sinusitis, heart failure, chronic obstructive pulmonary disease (COPD), chronic kidney disease (CKD), depression and back pain.¹⁴

Since the only way to decrease the prevalence of these conditions is to address their underlying risk factors, the goal was to map the complex interdependencies between behaviours, risk factors and disease. As part of a research project conducted by BCG and Healthways between 2006 and 2007, a panel of specialist doctors and epidemiologists was convened to validate the main risk factors that had identified. Eight well-known behaviours were identified as the major contributors to the most costly illnesses: smoking, physical inactivity, poor diet, alcohol consumption levels, poor standard-of-care compliance, poor stress management, insufficient sleep and lack of health screening.

The actual bearing that any one of these behaviours has on productivity or cost varies according to the profile of a workforce. For more information on each of these eight key risk factors, visit the World Economic Forum Wellness website, <http://wellness.weforum.org>. (An example of the information provided on the website is shown in Appendix A.)

The science of correlating behaviours and chronic illness is a work in progress. Despite the advances that have been made, many metrics and definitions have yet to be standardized, and many countries lack adequate data on the costs and drivers of each chronic ailment. Questions remain about a range of complex interdependencies: for instance, how one chronic condition relates to another; how one risk factor relates to another; and how environmental factors influence individual behaviours.

In addition, while the optimal intervention for a specific risk factor can usually be pinpointed, its medium- and long-term ROI is not always known. Nor can its second- and third-order implications be determined with certainty. Intervening to mitigate one risk factor, such as smoking, will likely have an impact on other risk factors, such as alcohol consumption or diet. As time goes on and more empirical evidence is gathered, it is expected that many of these gaps will be filled.

Although the science clearly has further to evolve, this should not keep companies from building the economic logic for investing in wellness.

11 For more information, visit <http://www.meps.ahrq.gov/mepsweb/>.

12 Though there are specific studies for particular diseases across countries, a key analytical hurdle is the lack of a consistent and comprehensive database for multiple diseases. For example, in India the average monthly direct cost per person for rheumatoid arthritis is estimated to be 623 rupees (approximately US\$ 180); and in China the average annual drug expenditure for cancer treatment is 8,275 yuan per patient (approximately US\$ 1,000); but there is no comprehensive database in either country comparing the cost of these conditions to other conditions. See Sukhpreet, et al., "Treatment and monitoring costs in rheumatoid arthritis: Preliminary results from an Indian setting," *Indian Journal of Pharmaceutical Sciences*, 69:2 (2007): 226-231; Zhou, Bo, et al. "Social health insurance and drug spending among cancer patients in China," *Health Affairs* 27: 4 (2008): 1020-1027.

13 See for examples Goetzel, et al., "Health, absence, disability and presenteeism cost estimates of certain physical and mental health conditions affecting US employers", *Journal of Occupational and Environmental Medicine* 46 (2004): 398-412; Loeppke, et al., *ibid.*; Sean Sullivan, "Making the business case for health and productivity management", *Journal of Occupational and Environmental Medicine*, 46 (2004).

14 Of course, there are differences in how conditions are defined, aggregated and accounted for across countries and methodologies within countries.

Modelling the Impact of a Comprehensive Wellness Programme

BCG and Healthways developed an epidemiological simulation model to identify and study how individual employee behaviours contribute to chronic illness over a five-year period. The model illustrates how the presence or absence of a comprehensive wellness programme would affect healthcare costs and productivity over a five-year period. It also gauges the potential impact of various interventions. The model has been updated and tested on different organizations over the last two years.

Based on the insights generated by this process, especially around the way key risk factors drive illness, we have developed a simpler, more user-friendly application, the **Wellness App** (see screen shot below and to access the application, go to: <http://wellness.weforum.org>). By experimenting with six variables, the user can calculate the costs of specific illnesses, determine the effects of each intervention and estimate the ROI over a five-year period. The six variables are:

1. Location of the workforce: the United States, European Union and Asia (India/China)
2. Age distribution of the workforce: 18-34, 35-44, 45-54, 55-64 and 65-plus
3. Gender profile of the workforce
4. Health status of the workforce: relative prevalence of major chronic ailments
5. Behaviour profile of the workforce: relative prevalence of modifiable behaviours and risk factors
6. Regional average wages

While other models exist, many have certain limitations: they either focus on a small number of conditions (sometimes just one), or provide only a one-year view. In addition, most tools cannot simulate the impact of changed behaviours on chronic conditions, and therefore cannot estimate the costs of a condition over a period of three to five years. The Wellness App can.

The Wellness App

The screenshot displays the 'Your Company Profile' section of the Wellness App. At the top, there is a navigation bar with the World Economic Forum logo and menu items: Home, The Model (selected), Wellness Risk Factors, Read the Paper, About the Model, and Share This Site. Below the navigation bar, the 'Your Company Profile' section is titled 'Input:'. The first question is 'How many employees do you have in the US, Europe, India and China?' with a text input field containing '10,000' and a note '(minimum 1,000)'. The second question is 'Where Are They? And How Much Do They Earn On Average?' with three columns for 'US', 'Europe', and 'India & China'. Each column has a percentage input field (30%, 40%, 30% respectively) and a regional average salary input field (\$40,000, \$50,000, \$5,000 respectively). Explanatory text for the percentages states: 'Location Distribution (%) (Total may be less than 100%; the model will adapt accordingly.)' and for the salaries: 'Regional Average Salary (\$USD) (e.g., US \$40,000, EU: \$50,000, India & China: \$5,000)'. At the bottom of the form, there are three buttons: 'BACK', 'CLEAR SESSION & START OVER', and 'NEXT'. The footer of the app includes 'Developed by The Boston Consulting Group' and 'Powered by Healthways Simulation Model™ Application Developed by Beehive Media'.

We used our comprehensive model to simulate more than 100 hypothetical companies with different employee profiles. This allowed us to identify the costliest chronic conditions for different types of employee populations. The costs were associated with both healthcare and lost productivity.

This extensive simulation exercise yielded three distinct sets of conclusions. First, looking at healthcare costs, several similarities and differences among regions and countries were found:¹⁵

- Across all US and EU company profiles, the costliest chronic ailment is cancer
- In US companies with a younger-than-average workforce, depression ranks among the top five drivers of healthcare costs
- In US companies with an older workforce, coronary artery disease ranks among the top five cost drivers¹⁶
- For Asian companies, diabetes ranks in the top three cost drivers. It ranks in the top two for companies with an older-than-average workforce, alternating with chronic kidney disease

Second, the full costs of each chronic condition were investigated – that is, higher healthcare costs and lower productivity:

- The single costliest condition, for all companies in all regions, is obesity
- In EU and US companies, depression ranks among the top five cost drivers, regardless of age bracket
- In EU and US companies with a younger workforce, the three most costly ailments are obesity, back pain and depression
- In EU and US companies with an older-than-average workforce, the three costliest ailments are, in most cases, obesity, cancer and arthritis

Finally, the most effective interventions for the modelled companies were identified. Several actions stood out:

- For all companies in all regions, regardless of employee age bracket, addressing physical inactivity and poor standard-of-care compliance rank among the top three interventions
- For companies in the European Union and Asia, a smoking-cessation initiative is among the top five interventions for cutting healthcare costs
- For younger-than-average US companies, stress management is among the five most cost-effective interventions

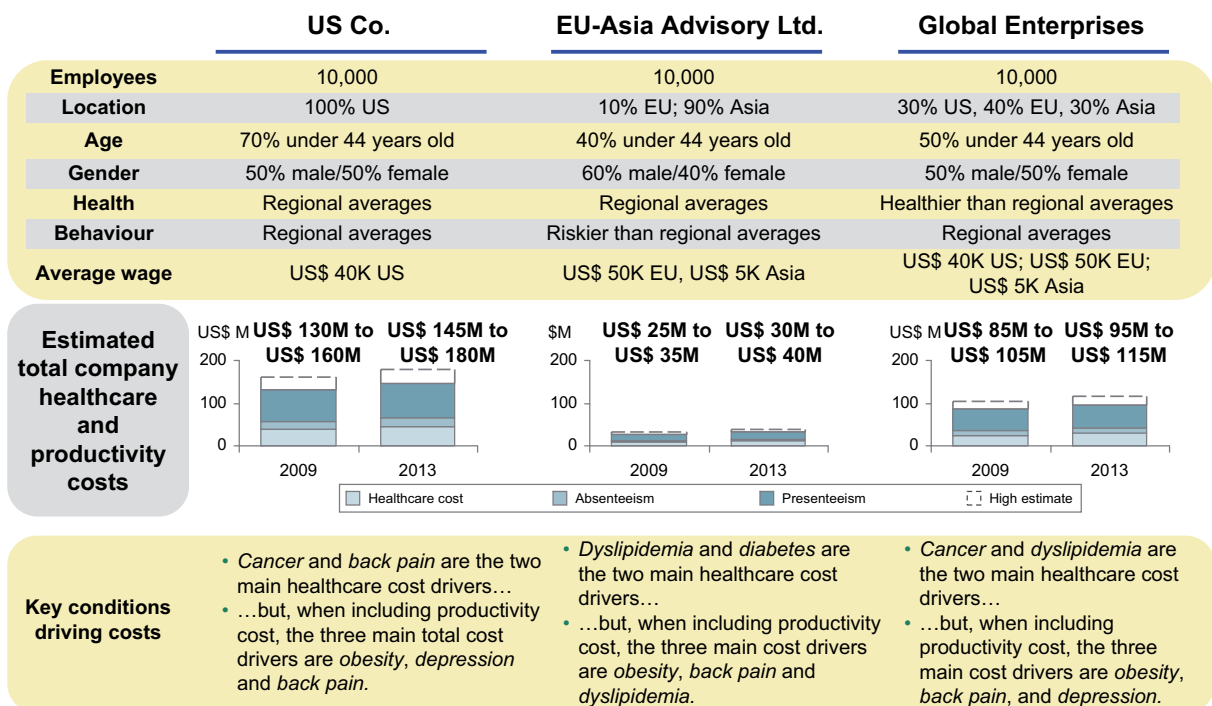
¹⁵ For information about the assumptions used to determine the impact of various conditions, see “About the Model” at <http://wellness.weforum.org>.

¹⁶ The impact of this and other conditions varies according to the workforce profile. In a US company with an older workforce of 10,000 employees, for example, CAD is the fourth costliest healthcare cost driver and is expected to cost between about US\$ 2.5 million and US\$ 3.1 million in one year. In a similarly sized US company with a younger workforce, CAD is the sixth costliest healthcare cost driver and is expected to cost between about US\$ 1.1 million and US\$ 1.4 million in one year.

What matters most, however, is the portfolio of interventions that will have the greatest impact on a specific population. In practice, the impact of a wellness programme – and the mix of interventions that will make the greatest difference to productivity and costs – will vary according to the profile of a workforce. A description of three hypothetical companies illustrates the extent of this variation. Each hypothetical company has 10,000 employees. Their names reflect their geographic composition: US Co., EU-Asia Advisory Ltd. and Global Enterprises. Not surprisingly, they have distinct wellness profiles. Over the next five years, the biggest drivers of healthcare costs for US Co. will be cancer and back pain; for EU-Asia Advisory, they will be dyslipidemia and diabetes; and for Global Enterprises, they will be cancer and dyslipidemia. But lost productivity can be traced back to different sources. In US Co., for example, high levels of obesity, depression and back pain will have the greatest impact on productivity. (See Exhibit 1.)

Exhibit 1

Key Chronic Conditions Driving Healthcare Costs and Affecting Productivity at Three Different Modelled Companies



The next step is to develop a comprehensive view of the behaviours – and corresponding interventions – that will have the greatest impact on the bottom line.

The Wellness App estimates the potential impact of different interventions for a specific workforce and calculates a basic ROI. For example, by instituting a portfolio of cost-effective interventions, Global Enterprises would – over a five-year period – realize estimated savings of US\$ 20 million to US\$ 25 million on medical costs and productivity. This would translate into an ROI of 390% to 755%, depending on the location of the employees. (See Exhibit 2.)¹⁷

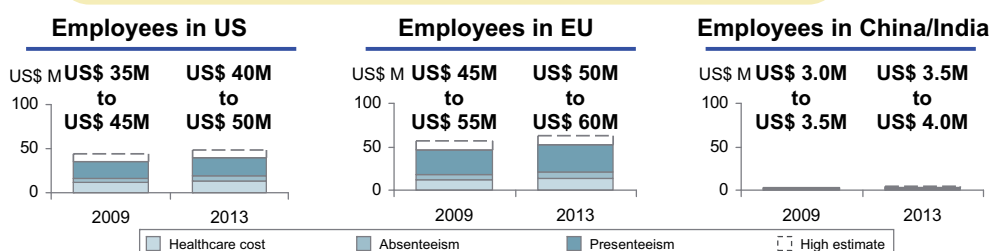
Exhibit 2

Regional Differences Impact Cost and Potential Savings Distribution between Regions in a Global Company

Global Enterprises – company profile

Employees	10,000
Location	30% US, 40% EU, 30% Asia
Age	50% under 44 years old
Gender	50% male/50% female
Health	Healthier than regional averages
Behaviour	Regional averages
Average wage	US\$ 40K US; US\$ 50K EU; US\$ 5K Asia

Estimated total company healthcare and productivity costs by region in year 1 and year 5



Estimated savings and return on investment of programme targeting inactivity, stress, alcohol over five years

Region	Potential savings	Intervention cost	HC ROI	Productivity ROI	Total ROI
Employees in US	<ul style="list-style-type: none"> Healthcare: US\$ 6M-7M Productivity: US\$ 4M-5M Total: US\$ 10M-12M 	<ul style="list-style-type: none"> US\$ 8 per member per month 	290-375%	210-280%	600-755%
	Employees in EU	<ul style="list-style-type: none"> Healthcare: US\$ 5M-6M Productivity: US\$ 5M-6M Total: US\$ 9M-12M 	<ul style="list-style-type: none"> US\$ 8 per employee per month 	140-195%	150-205%
Employees in China/India		<ul style="list-style-type: none"> Healthcare: US\$ 0.7M-0.8M Productivity: US\$ 0.4M-0.5M Total: US\$ 1.1M-1.3M 	<ul style="list-style-type: none"> US\$ 1 per employee per month 	265-345%	150-205%

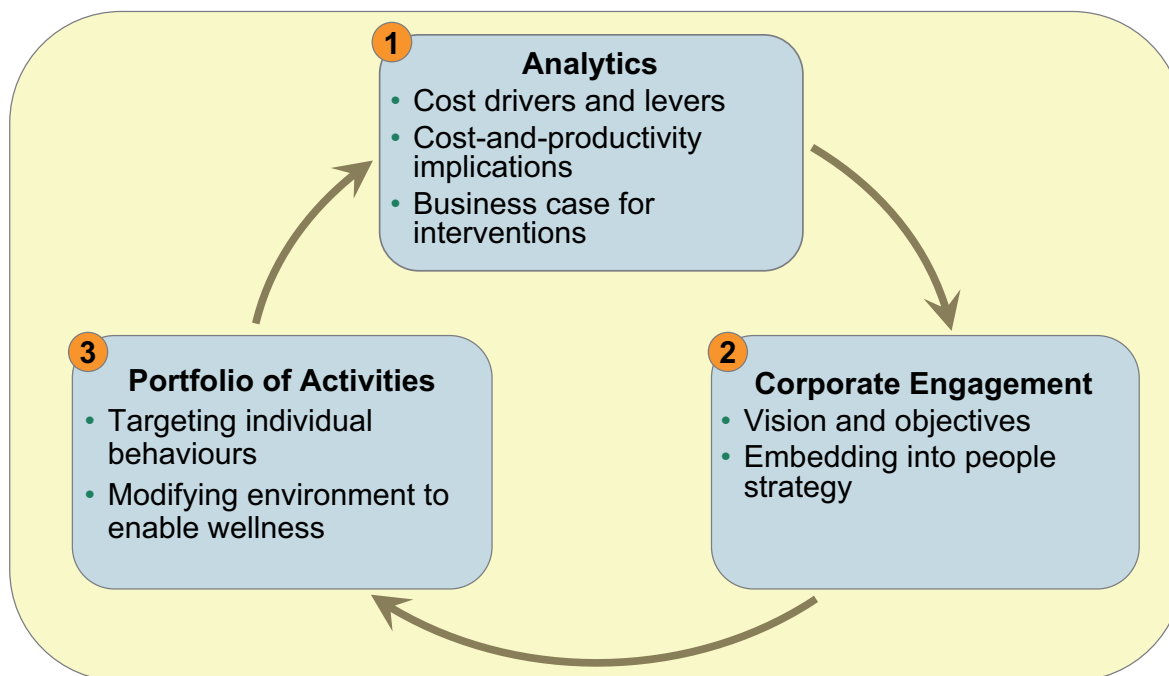
17 For details and assumptions on the ROI calculations, see <http://wellness.weforum.org> for additional details and assumptions.

Developing an Integrated Approach to Wellness

The Wellness App can provide useful insights, but it is not a substitute for the kind of thorough approach that would underpin a typical capital investment programme. An effective wellness programme should have three key characteristics: it should be based on robust analytics; it should be guided by a strategic vision and deep corporate engagement; and it should comprise a comprehensive portfolio of activities that modify employees' behaviours and reinforce these changes by influencing their environment, both at work and in their communities. In combination, these three elements can create a virtuous circle, with the results of various activities enriching the analytics, strengthening corporate engagement and leading to even more effective interventions. (See Exhibit 3.)

Exhibit 3

Addressing the Chronic Disease Burden and Fully Realizing the Value of Wellness Requires an Integrated Approach



1) Robust Analytics

A wellness programme should be predicated on data showing the company-specific causes and extent of lost productivity and health-care costs, as well as the risk factors and the impact of potential interventions. In the absence of such data, the topic would fail to get the attention of the executive suite, and the programme would most likely remain an HR issue.

Several executives interviewed as part of the study emphasized the importance of analytics and data. “One of the key things we need to take our wellness programme forward is better data, more robust analysis,” noted the director of international affairs of a global food and beverage company. “Otherwise, I don’t have the attention of my executives.”

An example of how to do things comes from Navistar International. In developing its Vital Lives wellness programme, the company used detailed analytics to estimate the cost of key risk factors and design a portfolio of interventions. (See Exhibit 4.)

Exhibit 4

Case Study Example: Navistar Has Used Strong Analytics to Build a First-class Wellness Programme

1. HRAs, now with 90% company participation, were introduced in 1998 to identify top healthcare and productivity costs by condition

Top risk factors	Additional cost per high-risk employee (US\$)	At risk (%)	Total annual additional cost of current risk factor (US\$)
Weight	690	28	2,801,400
Depression	2,326	4	1,349,080
High stress	1,435	5	1,040,375
High blood pressure	390	15	848,250
Insufficient exercise	339	17	835,635
Tobacco	447	11	712,965
Total			7,587,705

2. Implemented interventions were based on the learnings from the data

- Diabetes education project
- Disease management programme
- Health club subsidy/exercise incentive programme
- Smoking-cessation programme

The Wellness App provides directionally correct insights into key drivers of healthcare costs and lost productivity, along with the impact and implementation costs of different interventions. For some small and midsize companies, this may be enough to begin building a case for developing a comprehensive programme. Other companies can easily leverage claims data from private health insurers or arrange health risk assessments (HRAs) for employees to identify, and target, their specific cost drivers.

2) Corporate Engagement

As with any corporate initiative, a wellness programme needs a clear vision and set of objectives. It also needs the support of senior executives. Robust analytics will lay the groundwork for such support, but the proponents of wellness should also emphasize how the programme fits into a broader agenda of workforce development.

Enabling and ensuring deep corporate engagement takes a conscious effort. A case study exemplifies this point. At Lincoln Industries, a small Nebraska company specializing in metal finishing, CEO Marc LeBaron has made wellness a priority: “Too often, companies look at wellness as a standalone programme – just another benefit. We have fully integrated wellness into every aspect of our company’s culture. As a result, wellness has become a critical element of our success.” In another interview, the CEO of a mining organization in Australia admitted, “In the past, I had considered wellness only as a peripheral issue, limited to our welfare teams. Even in our resource-intensive industry, the value of our people and their long-term performance is intrinsically linked to that of the company.”



Nestlé's efforts to improve employee wellness are both well known and long established – they go back to 1919, when the company set up a tennis club for its employees. Since then, the company has created several initiatives that focus on physical fitness and nutrition. In 1993, for example, it launched the “Corps à Coeur” (body-to-heart) programme for preventing cardiovascular disease. More recently, in 2007, the company's Corporate Wellness Unit launched its “Nutrition Quotient” training programme for all Nestlé employees. Employee wellness has been integrated into the business strategy and has remained a core part of the corporate culture. The benefits extend beyond greater productivity to include improved retention and recruitment of top-quality staff.

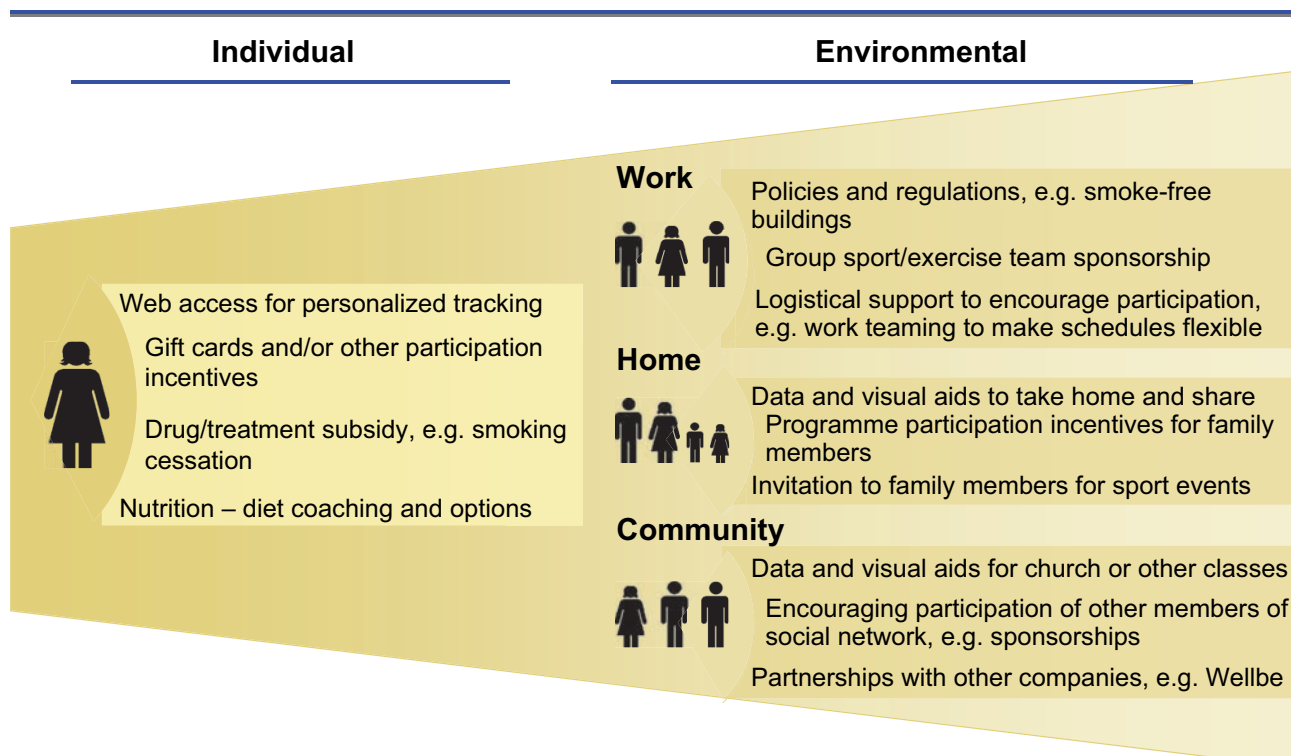
3) Portfolio of Specific Activities

A silver bullet for changing behaviours remains undiscovered. It is not expected that one will be found, because the issue is inherently complex. Experts in behaviour modification and risk factors suggest that success – in terms of addressing behaviours – requires two types of initiatives. One approach targets high-risk individuals with incentives, education and counselling. The other approach deals with the environment within and beyond the workplace. It encompasses everything that is supportive of employees' well-being and is conducive to healthy behaviour – their work team, church, sports club, social-support group, online social networks and, above all, family.

The range of individual and environmental activities is broad. (See Exhibit 5.) Activities targeting individuals can include smoking-cessation programmes, personalized diet coaching and fitness incentives such as free gym membership. Providing employees information they can use to manage their own healthcare and wellness is

Exhibit 5

Examples of Activities Abound at Both Individual and Environmental Levels



itself a useful tool. Activities at the environmental level can be tactical, such as a no-smoking policy in the building, distribution of booklets on nutrition for workers to take home and share with their families, sponsorship of company sports teams and community initiatives such as local health fairs. And they can be more strategic: supporting the population health strategies of the government or relevant players; encouraging health providers to focus on preventing disease; and targeting community problems such as substance abuse, poor eating habits or lack of athletic recreational resources.

Environmental activities often involve community networking, and many individual activities are outsourced to vendors. Companies might even consider developing wellness in collaboration with other companies or business partners. (See the Sidebar “BT’s Wellness Venture”.)

As clear and consequential as the risk factors are, many of their corresponding interventions suffer from a lack of innovation and development. For example, activities to address stress in the workplace are generally still in their infancy. And yet, stress management has the potential to significantly improve productivity, particularly in US companies that have a relatively young workforce.

BT’s Wellness Venture

The British-based telecommunications company BT already has a wide-ranging wellness programme, Well Fit, for its 103,000 employees. For good business and philanthropic reasons, however, it is joining forces with several other large organizations to develop a public wellness programme, Wellbe, due to launch in early 2010.

Wellbe aims to engage the public through motivational and fun campaigns, ranging from a “Walk off Christmas!” competition to activities leveraging the Olympic Games. BT’s main collaborators are Oracle, Pfizer and the National Health Service’s Institute for Innovation and Improvement. This combination of brands – and skills – should prove to be powerful.

The public relations opportunities for BT are obvious, but there are also subtler opportunities – for research, for creating new services for customers and for business collaborations with its Wellbe corporate partners.

Developing an Action Plan

For most companies, the path to developing a plan for wellness should start with strong analytics. For those that are just beginning to address wellness, strong analytics provide a baseline for assessing the magnitude of the opportunity and setting a strategy. For others, it provides a basis for an informed debate about the appropriate aspirations and level of engagement.

When choosing their next investment, companies can enter the integrated approach at any point – analytics, engagement and activities – depending on their wellness history and current position. What is the senior leadership's thinking on the subject of workforce wellness? What activities are in place to modify employees' behaviours? How successful have these activities been up to now, and when and how are metrics tracked? What can be done to take existing programmes to the next level?

From our research and case work, we have identified four distinct stages of involvement:¹⁸

- Companies that are interested in wellness are usually poised to pursue a few simple but effective actions.
- Companies that are engaged in wellness are building up steam – learning from their experiences, striving to identify and target risk factors more accurately, and persuading the key decision-makers (senior executives) of the value of adopting a comprehensive programme.
- Companies that are getting sophisticated about wellness are addressing all three components of the integrated approach and are already seeing a modest rise in productivity as well as a fall in per capita healthcare costs. Typically, they are busy designing and developing internal activities while also working with external stakeholders to enhance their employees' environment.
- Companies that are integrating wellness into core business systems – which is still an aspirational stage for most companies – are constantly refining and tracking metrics for use in business and strategic decisions, and are coordinating their various initiatives, especially those with key external stakeholders.

In reality, of course, these stages are not entirely clear-cut, and some companies straddle the boundaries. The purpose of the classification system is simply to establish a basis for advising organizations on their next steps. For each stage, we have identified the most valuable actions the organization can take within each of the three components of the integrated approach (analytics, engagement and activities). The full listing appears in Appendix B. Some of the actions cover more than one component.

¹⁸ This is the framework that works best for us, but it is not the only one; as an alternative, see, for example, Employer health asset management: A roadmap for improving the health of your employees and organization, Change Agent Work Group, 2009.

- In fostering corporate engagement, companies at stage 1 should identify a mid- or high-level manager to act as “Wellness Champion.”
- In upgrading their portfolio of activities, companies at stage 2 should enable employees to track their progress towards a wellness objective online.
- In refining their analytics and ensuring management engagement, companies at stage 3 should make certain that wellness metrics are factored into performance reviews.

Organizations graduate to stage 4 when wellness becomes part of the organization’s business DNA. The analytics are updated constantly and are actively consulted by decision-makers. The overall programme is regularly reviewed and modified. An impressive portfolio of activities, both individual and environmental, is in place, and participation levels are high among almost all groups of employees. These organizations seek opportunities to collaborate with other companies as well as community-based groups – their efforts to influence the employees’ environment are not confined to the workplace. All activities are coordinated by a full-time programme manager, who tracks the results and compiles data to compare progress and suggest refinements.

Moving Forward

Chronic illness costs; combating it pays. Executives have a responsibility to their employees, as well as their shareholders or sponsors, to engage the subject of wellness with a renewed sense of purpose. The link between interventions and illnesses – by way of changed behaviours – has become too compelling to ignore. Companies now have a clear opportunity to improve productivity and lower costs by developing a more rigorous approach to improving wellness.

As they embark on the second wave of workforce wellness, companies should ask:

- What are we doing to improve the wellness of our employees?
- Do we have the right portfolio of activities? Are we reinforcing the right behaviours at the worksite and in the community?
- Are we getting our money's worth from the investment? Can we measure the impact of a wellness initiative and change course, if necessary?
- Where are we on the continuum of novice to expert in wellness management? What should our aspiration be in terms of workforce engagement and productivity? Where are our greatest gaps – in analytics, in corporate engagement and in the portfolio of activities – relative to our aspiration?

The decision to embrace wellness is not an inexpensive one. But when done with the proper business discipline and weighed against other capital investments, it is likely to rank surprisingly high during the annual budget process. A comprehensive wellness programme is not just the right thing to do for the workforce; it should be an attractive business proposition as well.



Appendix A

The website associated with this project provides extensive information on the eight main risk factors, along with the interventions targeting those risk factors. To access it, follow this link: <http://wellness.weforum.org>. Each risk factor is covered by three one-page charts or tables, which provide:

- High-level information on the specific risk factor (an example is shown below)
- Links to more information about the risk factor, as well as data limitations
- Sources for all of the information provided on the risk factor

(See Exhibit 6.)

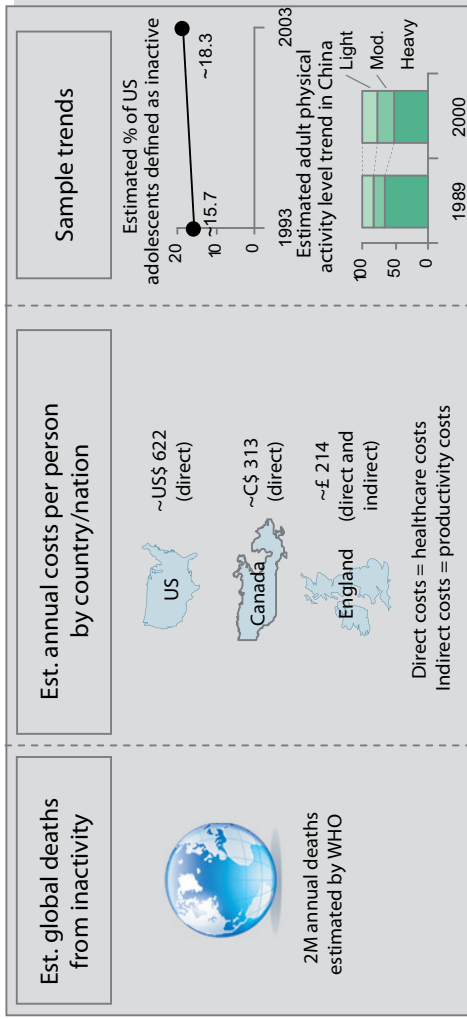
Appendix B

Organizations can be classified into one of four stages, based on the sophistication of their approach to wellness. We have identified the key actions for any organization at each stage, and have classified them according to the components of the integrated approach – analytics, engagement and activities. (See Exhibit 7.)

Exhibit 6

Reducing Healthcare Costs and Increasing Productivity by Investing in Increasing Physical Activity in Your Company

Why does this matter?



How does this affect the health of your employees?

Relationship with chronic conditions	Relationship with other behaviours
Physical activity reduces the risk of having a number of chronic conditions: <ul style="list-style-type: none"> Coronary heart disease Diabetes Cancer Obesity Hypertension Depression 	Physical inactivity is associated with other risk factors of chronic conditions: <ul style="list-style-type: none"> Smoking – Less likely to cut down on or stop smoking Overweight/obesity – Less likely to lose excess fat Sleep – More likely to suffer from sleep problems

What can you do about it?

Examples of activities

Individual level	Environmental level
<ul style="list-style-type: none"> Free employee screening (BMI) Cash incentives (e.g. gift cards) for completing exercise goals Providing educational material to all employees Providing online data access for data tracking, social networking Customized counseling/training 	<ul style="list-style-type: none"> Support/sponsorship of team sports and activities Enabling attendance to onsite fitness facilities Ensuring healthcare provider includes discounts for gyms and physical exercise activities Providing educational materials to take home

Portfolio of interventions depends on starting point for each company

What return might you expect?

Examples	Activity	Result
Blue Cross/Blue Shield of Indiana	Corporate fitness programme	Savings: US\$ 2.51 per US\$ 1 spent ROI 151%
Coors Brewing Company	Corporate fitness programme	Savings: US\$ 6.15 per US\$ 1 spent ROI 515%
Canada Life Insurance	Corporate fitness programme	Savings: US\$ 3.43 per US\$ 1 spent ROI 243%

Want to know more?

This "one-pager" is supporting material for the paper "The New Discipline of Workforce Wellness"; follow the link on the right to learn more.

- Wellness App website: <http://wellness.weforum.org>

“Most Important Actions” for Organizations at Each Stage

	Stage 1 “Interested in Wellness”	Stage 2 “Engaged in Wellness”	Stage 3 “Getting Sophisticated about Wellness”
Analytics	<ol style="list-style-type: none"> 1. Identify existing wellness and prevention-related activities 2. Assess metrics in place and track a few of these (2-3), e.g. <ul style="list-style-type: none"> – number of participants – length of participation – simple survey of results 3. Assess and link existing employee data to portfolio of activities to track progress 4. Assess results every 6 or 12 months 	<ol style="list-style-type: none"> 1. Assess available employee-specific data <ul style="list-style-type: none"> – internally – externally – HC provider, insurer, govt. agency 2. ID key HC and productivity cost drivers for your employees: <ul style="list-style-type: none"> – internal, via HRA – external, via HC provider, insurer, govt. agency, e.g. claims 3. Develop a simple but powerful business case – leverage internal and external cost and savings estimates 4. Develop a standard programme-assessment form to track metrics and results every six to 12 months 	<ol style="list-style-type: none"> 1. Review latest HRA output and participation across all geographies, and update if necessary 2. Gather existing information on current portfolio of activities and update impact evaluation, at both individual and environmental levels 3. Complete (or refine) a comprehensive business plan, including ROI: <ul style="list-style-type: none"> – for the overall wellness initiative – for each segment, by region and programme 4. Clearly identify what is not known – what pieces are still needed for fully leveraging the impact of wellness for the company’s strategy 5. Ensure wellness metrics are embedded in performance metrics 6. Run a global employee survey to evaluate the wellness programme
Corporate Engagement	<ol style="list-style-type: none"> 1. Identify a mid- or high-level manager to act as “Wellness Champion” 2. Engage senior management in tracking of simple metrics 3. Align with HR on how existing wellness and prevention-related activities fit within HR strategy 4. Determine a few simple project objectives (1-3), e.g. <ul style="list-style-type: none"> – double participants in 12 months – sponsor two sports events 5. Develop a simple plan and communicate it to employees: <ul style="list-style-type: none"> – objectives – metrics – outcome 	<ol style="list-style-type: none"> 1. Draft a vision (or validate the existing one) for your wellness programme – where do you want to be 3-5 years out? 2. Revise (or draft) specific programme objectives and ensure they align with key cost drivers of your employee base, e.g.: <ul style="list-style-type: none"> – reduce smokers by 75% by next year – complete stress management training for all managers 3. Explore options to include wellness metrics in performance 4. Strengthen internal coordination by optimizing portfolio of activities around cost drivers specific to your employee base: reduce overlaps, cover gaps (activity or geography), share best practices 5. Explore opportunities to partner with key external stakeholders, e.g. schools, sports clubs, church 6. Develop a communication plan, including <ul style="list-style-type: none"> – objectives – metrics – outcomes 	<ol style="list-style-type: none"> 1. Ensure the vision for the wellness programme is 100% aligned with corporate vision, including revision cycle – currently and 3-5 years out 2. Develop a work plan to evaluate and adjust the programme during the year 3. Strengthen existing objectives and ensure that they are aligned with key risk factors <ul style="list-style-type: none"> – strengthening internal coordination, e.g. by <ul style="list-style-type: none"> – responding to geographical variances – sharing best practices 4. Rotate role of “Wellness Champion” among key internal stakeholders 5. Ensure that performance metrics are capturing wellness activities 6. Implement training for management 7. Evaluate current external collaborations, and prioritize them 8. Revise your communication plan, using the survey results
Portfolio of Activities	<ol style="list-style-type: none"> 1. Develop a simple participation incentive program, e.g. award, cash 2. Provide existing health-and-wellness material to employees and families 3. Assess opportunities to extend current activities to target these five modifiable behaviours: <ul style="list-style-type: none"> – physical inactivity – poor diet – poor SoC compliance – stress – smoking 	<ol style="list-style-type: none"> 1. Evaluate and improve the incentive programme participation, e.g. cash, gift cards, points 2. Refine health-and-wellness material to be shared with employees and families, and ensure these focus on key cost drivers 3. Develop internally or with a third party a comprehensive wellness programme, focusing on key cost drivers for your employees <ul style="list-style-type: none"> – physical inactivity – poor diet – smoking – stress 4. Explore opportunities to target, e.g. <ul style="list-style-type: none"> – physical inactivity – poor diet – smoking – stress 5. Ensure online access capabilities for tracking data, social networking 	<ol style="list-style-type: none"> 1. Review portfolio of activities based on impact evaluation, and ensure alignment of activities to key cost drivers: <ul style="list-style-type: none"> – healthcare costs – productivity costs 2. Develop a simple but effective framework to prioritize wellness activities across portfolios <ul style="list-style-type: none"> – type of activity – region



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