



Chronic disease in the workplace:

Focus on prevention and support

Life's brighter under the sun



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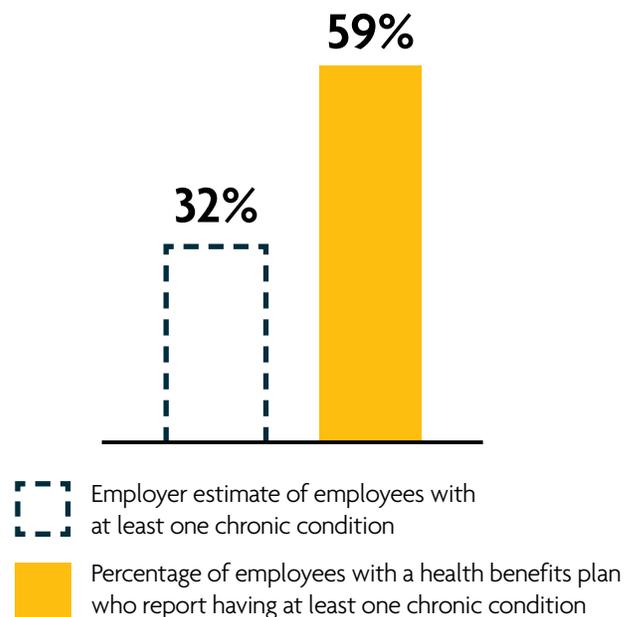
It's hard to imagine that over half of the Canadian workforce is living with at least one chronic medical condition. These long-term, often slow progressing conditions, some physical like heart disease and diabetes, some psychological like depression, can have serious consequences to employee health and pronounced impacts on workplace productivity and benefit plan costs. The Public Health Agency of Canada estimates that **chronic disease costs the Canadian economy \$122 billion annually in lost productivity.**

As chronic conditions are typically without any overt physical markers, many of us do not realize their true prevalence and impact – this includes employers. The 2016 Sanofi Canada Healthcare Survey found that **59 percent of employees with a health benefits plan are living with at least one chronic condition**, but when employers were asked about the prevalence of chronic conditions in their workplace, they estimated the employees affected at just 32 percent.

This gap in awareness means that many employers are greatly underestimating the impact of chronic disease on their workplaces. What's more is the incidence of chronic disease is increasing with the aging population and unhealthy lifestyles.

This is not a fate written in the stars. Chronic health conditions are more preventable and manageable than ever. Employers are ideally positioned to support the physical, mental and financial health of their employees. In turn, employees are looking to their employers for support. By cultivating a strong organizational culture of health, taking a strategic approach that identifies key health challenges and takes targeted actions to address them, employers can help secure a healthier future for their employees, increase productivity and help manage benefit costs.

Figure 1
The disconnect



2016 Sanofi Canada Healthcare Survey



"...according to the World Health Organization, 80 percent of cardiovascular-related mortality is preventable."

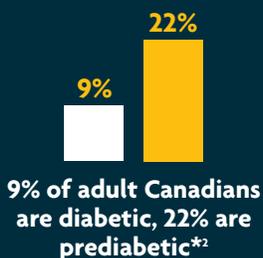
Chronic disease explained

Unlike an acute illness (such as the flu, strep throat, or a muscle strain) that has a beginning and end, a chronic disease is a condition that is ongoing and persists indefinitely. Chronic diseases are often progressive, and although many are incurable, they are often manageable with the right treatment and lifestyle. They are also more common than many people realize.

Although, there are dozens of chronic diseases, Health Canada identifies 10 major classes: heart disease, stroke, cancer, asthma, chronic obstructive pulmonary disease, diabetes, arthritis, Alzheimer's or other dementia, mood disorder (depression), and anxiety disorders.

Chronic disease: more common than you think

Examples of chronic disease prevalence in the adult Canadian population:



an estimated
1.6 million
Canadians are living
with heart disease
or effects of a stroke³



20% of Canadians will
experience a mental illness
– with the most frequent
illnesses, depression and
anxiety, considered chronic
by Health Canada⁴



1 in 6 adult
Canadians has
arthritis⁵

*Prediabetics have blood sugar levels that are higher than normal but not yet high enough to be classified as diabetes. Without intervention, prediabetics are likely to develop diabetes in 10 years or less⁶

Rates are on the rise

Chronic disease rates are rising, with the prevalence of diabetes a prime example. By 2020, 4.2 million Canadians will be diabetic, up from 2.7 million in 2010, representing a more than 50 percent increase.⁷

Why the increase? Risk rises with age and our population is aging. For example, the risk of cardiovascular disease for a 55-year-old is more than double that of a 45-year-old.⁸

Another reason for the increase is new treatments that have changed once deadly or totally disabling health events into chronic conditions that can be managed. For example, Canadians who experience a heart attack are five times more likely to survive than they were a generation ago, meaning that 95 percent of those who have a heart attack and get to a hospital will survive.⁹ While this is great news for survivorship, it means many more people are living with a chronic condition that must be actively managed.

Unhealthy lifestyles

While some incidence of chronic disease is related to causes beyond an individual's control, much of it is preventable.

For example, the Canadian Cancer Society estimates that about 50 percent of all cancers can be prevented through healthy living – and policies (such as reducing exposure to second-hand smoke and other harmful substances) that are designed to protect our health.¹⁰ And according to the World Health Organization, 80 percent of cardiovascular-related mortality is preventable.¹¹

Unhealthy lifestyles related to poor diet, lack of exercise and inadequate stress management are key contributing factors, and the numbers in Canada are concerning:

- Obesity rates surged 200 percent between 1985 and 2011.¹² Health Canada reports that one in four Canadians over the age of 18 were clinically obese in 2014¹³
- Only one in five adult Canadians achieve the recommended 150 minutes of moderate-to-vigorous physical activity per week set out by the Canadian Physical Activity Guidelines for adults¹⁴
- Only four in 10 Canadians eat the recommended five or more servings of fruit and vegetables per day¹⁵
- Nearly a quarter (23 percent) of Canadians report a high degree of life stress¹⁶

This is not just an issue isolated to older Canadians: unhealthy lifestyles trickle down to the young. Obesity rates in children have tripled over the past 30 years – from 3 percent to 9 percent, and one-third of Canadian children are either overweight or obese.¹⁷

It's having an impact. Younger generations are beginning to experience the onset of chronic disease earlier and with more frequency.¹⁸



Many chronic diseases share the same major risk factors – most are modifiable with lifestyle changes.

Chronic disease risk factors:

Tobacco use

Raised cholesterol

The harmful use of alcohol

Overweight/obesity

Raised blood pressure (or hypertension)

Unhealthy diet

Physical inactivity

Raised blood glucose

Public Health Agency of Canada, Chronic Disease Risk Factors



How chronic disease impacts the workplace

While some chronic diseases cause only episodic problems or symptoms, many require ongoing management and/or medication. In some cases, the disease may severely limit a person's ability to work or take care of the routine tasks of daily life.

With the high incidence of chronic disease and its risk factors, the indirect costs to the Canadian economy are significant – estimated at \$122 billion annually in lost productivity.¹⁹ Chronic disease also has direct costs to employers. For example:

- 4 out of 5 of the most frequently reported disabling conditions affecting employees are chronic illnesses – musculoskeletal, depression, cancer, and cardiovascular disease²⁰
- Unmanaged chronic disease is the biggest cost driver for benefit plans²¹
- Heart disease and stroke are the biggest drivers of prescription drug use²²
- Employees with diabetes are absent two to 10 days more per year than those without diabetes²³
- Employees with arthritis cost employers approximately \$4,600 annually due to reduced performance at work²⁴

Comorbidity – the coexistence of two or more chronic conditions is common and can greatly increase the impacts to employees and employers. For example, the Canadian Diabetes Association reports that 30 percent of diabetics experience symptoms of depression.²⁵ Workers with comorbid mental health and physical health conditions have been found to have two to five times the likelihood of functional disability and absence from work.²⁶



Mental health and chronic physical disease closely linked²⁷

People who report symptoms of depression also report experiencing three times as many chronic physical conditions as the general population.

People with chronic physical conditions have twice the likelihood of experiencing a mood or anxiety disorder when compared to those without a chronic physical condition.





Financial health's impact on chronic disease

A person's financial health has been found to have a significant impact on both mental and physical well-being.

Research points to a **strong link between financial stress and the incidences of depression and anxiety disorders.**²⁸ For example, one study found that missing a mortgage payment was associated with a two to three-fold increase in the likelihood of experiencing a significant deterioration in mental health, such as the onset of depression.²⁹

The link between financial stress and physical health is also strong.

For example, studies have found that financial stress is associated with higher blood pressure as well as the experience of physical pain.³⁰ One study found that people undergoing debt counselling reported chronic back pain at a rate 11 times higher than the general population.³¹

Empowering employers and employees

Steps to reduce the impact of chronic disease

Employers can tackle the costs and incidence of chronic illness and build the foundation for a healthier workplace, by taking a comprehensive and strategic approach to supporting the health of their employees.

A critical place to start is the early identification of the health challenges that are affecting your organization so a targeted action plan can be developed to close the gaps.

A three-step process – organizational health assessment, strategic planning, and targeted programming – will help ensure you maximize the benefits for both your organization and your employees.



Assessment is the critical first step

Assessing your organization is the critical starting point toward the success of any program you put in place as it will uncover the specific health and chronic disease risks faced by your workplace that your wellness efforts should address.

It is important that this is done at two levels: **the organizational level** that looks at how well your organization's policies and practices are aligned with best practices that support a culture of health, and **the workforce level** which looks at the aggregate **physical, mental and financial health** of your employees. Together, these assessments will provide the comprehensive picture that will best guide your action planning.

Evaluating organizational influences like health and absence management practices and policies, leadership commitment to a culture of health and employee communication helps ensure you've got a solid culture upon which to build programs. Employee health metrics to be analyzed include leading indicators such as Health Risk Assessment (HRA) scores, Employee Assistance Plan (EAP) usage and screening clinic results, and lagging indicators such as disability and drug trends and employee engagement scores.

Employee health risk assessments (physical, mental and financial) and biometric screenings provide important baseline data, and – just as significantly – raise individual employees' awareness of their risk factors.

Awareness of cardiovascular risk (CVD) factors

A recent study of Canadian employees by the *Ivey International Centre for Health Innovation*, in alliance with **Sun Life Canada** focuses on workplace health screening clinics to determine the link between risk awareness and healthy behaviours.

- The study found that **40 percent** of employees were unaware of at least one of their CVD risk factors (weight, blood pressure, and cholesterol) before participating in the clinic. The lowest awareness was around cholesterol levels (**31 percent** did not know if they had high cholesterol)
- These individuals were more likely to report behaviours of higher risk for CVD. For example:
 - They were less likely to achieve the recommended levels of physical activity;
 - Less likely to report consuming at least three servings of fruits and vegetables; and
 - More likely to report consuming fast food meals at least once a week.
- The opposite was found for individuals who had accurate knowledge of their risk levels.

The research highlights a gap in awareness of CVD risk among Canadian employees, the important role that workplace screening clinics can play in raising risk awareness and the benefit that awareness may have in influencing healthier lifestyles.

The study was published in the May 2016 issue of the Journal of Occupational and Environmental Medicine²³



Assessment in action – Workplace Mental Health Risk Assessment

Mental health issues can have a profound impact on a workplace – and are a leading cause of absence and disability. Sun Life's Workplace Mental Health Risk Assessment – developed in alignment with the Mental Health Commission of Canada National Standard for Psychological Health in the Workplace – is an online risk assessment tool that helps employers assess their workplace culture and current state of psychological health and safety practices within their organization.



84 percent of Canadians believe that employers are responsible for supporting the physical health of their employees, while 86 percent feel the same about psychological health – 2015 Sun Life Canadian Health Index.

Prevention and the power of workplace wellness

Armed with a deep analysis of employee and organizational data, you're in an excellent position to develop and implement the strategy that is best for your organization. Your group benefits provider can be a key ally in helping you both develop and put a strategy into action that is focused on the areas where your organization is at highest risk.

For example, if your organization shows a risk for certain chronic conditions, your provider may offer a targeted prevention program that can address specific risk factors, such as diabetes or cardiovascular disease. Depending on the condition, these programs can include health screening clinics (for example, with a diabetes or cardiovascular focus), health challenges, and employee education sessions on topics such as nutrition, physical activity, musculoskeletal health, and stress and resiliency. Packaging these initiatives together and supporting them with their own communications plan helps raise awareness and the profile of the targeted chronic condition(s) as an organizational priority.

When it comes to mental health — which is a leading cause of disability for many organizations — your focused efforts can include programs such as workplace peer support, manager training, and organizational alignment with the National Standard of Canada for Psychological Health and Safety in the Workplace.

Ground breaking Canadian research shows positive impact of workplace wellness

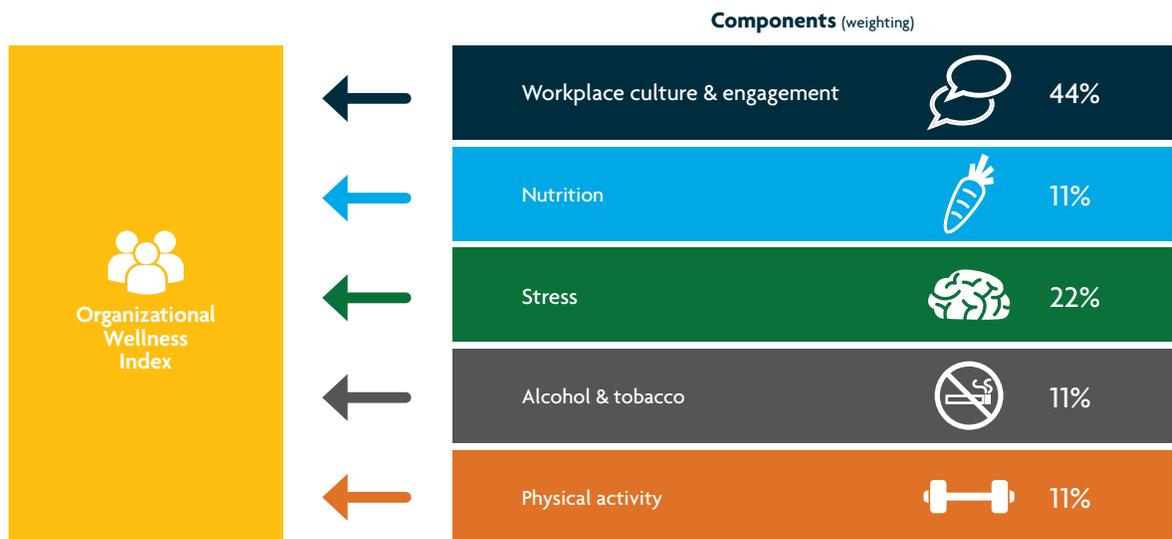
In 2015, the Ivey International Centre for Health Innovation, in alliance with Sun Life Canada completed a first-of-its-kind study in Canada, *the Sun Life-Ivey Canadian Wellness Return on Investment Study*, to investigate the impact of workplace wellness initiatives on employee health and health behaviours.

The study was conducted by Ivey over two years, using a treatment group and two types of control groups, ensuring a high level of academic rigor. Wellness programs were implemented in six organizations, representing 28 unique worksites and 820 employees. The employers were located across the country and reflected a variety of industry sectors and a diverse range of job categories.

The study consisted of a wellness treatment group and two different control groups, across the participating organizations.

1. The first control group completed a wellness survey.
2. The second control group completed the survey and received biometric screening.
3. The wellness treatment group had both the survey and biometric screening, and most importantly, access to a comprehensive wellness program, which included a wellness website with resources and wellness tools, a lifestyle modification program, individual one-on-one coaching as well as other supports.

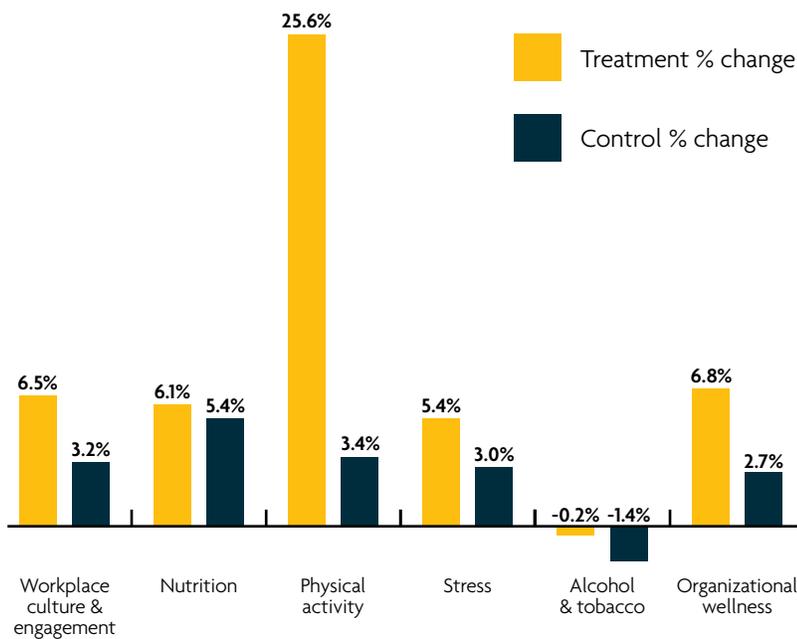
Organizational Wellness Index



As part of the study, the Ivey research team conducted an extensive review of academic literature to develop the **Organizational Wellness Index**, a survey based tool to measure organizational wellness at a given point in time. The Index, unique to the industry, is a weighted composite measure that summarizes an organization's performance on critical aspects affecting the well-being of its employees



Figure 2
Organizational Wellness Index
Score % change
(beginning to end of study)



The impact of wellness

The researchers used the **Organizational Wellness Index** to compare the results of the the treatment and control groups in the study. As figure 2 shows, the treatment group outperformed the control groups across factors and had an **Organizational Wellness Index** score that increased significantly more. The most striking difference was in physical activity scores, which is particularly good news given the ties between an active lifestyle and the risk factors associated with chronic disease.

Participants in the treatment group also reported a number of positive health outcomes during the study:

- 53 percent said their physical activity level had increased
- 51 percent said their nutrition had improved
- 23 percent said they had lost weight
- 23 percent said they had more energy.

Culture is the foundation

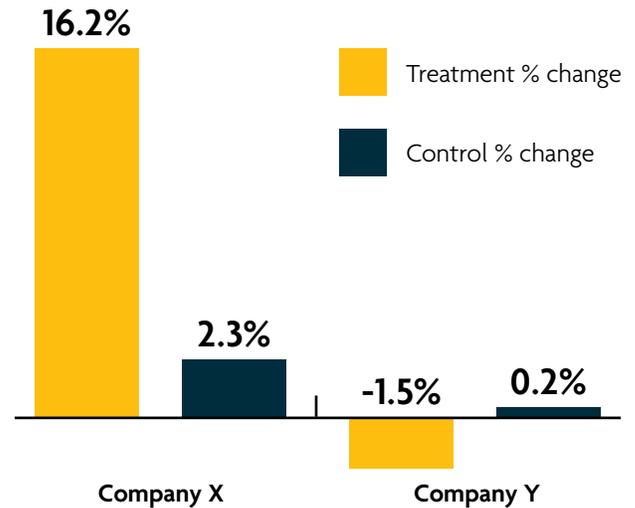
A proactive culture of health – one that reflects policies and practices that are aligned with health – is a critically important foundation to workplace wellness programs. The foundational importance is highlighted in the study.

The company with the best outcomes (“Company X”) had engaged management, promoted the program well and achieved excellent results. The company with the weakest results (“Company Y”) experienced a high level of organizational change during the two-year time period, with high levels of work related stress. In fact, the leadership team that had introduced the wellness program was no longer in place by program’s end. These cultural deficits impacted the success of the program; as noted above, a healthy workplace culture is a necessary foundation for successful wellness programs.

If you’re considering the implementation of a wellness program, you’ll want to review key strategic elements like leadership commitment, practices and policies, and employee communications to ensure that your foundation is strong. Your group benefits provider can help you undertake this assessment.

Figure 3

Organizational Wellness Index Score % change (a comparison of two companies)



Five best practice elements for wellness program success

1

Leadership

Support from top management is essential to the success of any initiative – and organizational health is no exception. A strong commitment from senior managers – with a show of leadership by example – can be instrumental in creating a healthy workplace culture and lasting program success.

2

Policies and practices

The organization’s existing policies and practices should reflect a culture of health or be amended to ensure consistency with any wellness initiatives.

3

Communication

Communication is a critical component of any wellness initiative. The extent to which employees understand the employers’ commitment to employee health and understand the wellness offering – and the benefits and incentives associated with it – will largely determine the success of the program.

4

Targeted programs

Identify your top priority health risk areas then target programs to address these. Assessment activities – like the survey and the biometric testing in the study – help to identify these risks with data that provides a baseline of the health status of employees which can help in the measurement of program success.

5

Evaluation

The evaluation of a wellness strategy involves an analysis of outcomes and a revisiting of benchmarks, ensuring business objectives are being met. These analyses can also provide insight into how a program can be improved.



Support for those with chronic disease

Despite best efforts at education and prevention, the reality is that many people will be living (and working) with chronic diseases. Employers who can support these employees to manage their conditions (with healthy living and adherence to treatment – such as taking medication as prescribed) will significantly mitigate costs related to disability, absenteeism, benefits costs and lost productivity.

In addition, targeted disease management programs will become increasingly important in the coming years as the incidence of chronic disease rises. According to the 2016 Sanofi Canada Healthcare Survey, 84 percent of employees with a chronic disease want to learn more about their condition and treatment. The need is clear for information resources that employees can access.

There's an app for that!

mHealth – mobile apps and devices that support people to live healthier lives is an exciting trend in the prevention and management of chronic disease.

The mHealth space has exploded in recent years – there are apps that help people closely monitor their conditions, analyze and share data with their physician, apps designed to motivate healthy lifestyle changes, connect people with educational resources, access medical experts remotely...the list goes on and so does the potential to positively impact the prevention and management of chronic disease.

The **bant** app, developed by researchers at the **Centre for Global eHealth Innovation at Toronto's University Health Network** is a pioneering example. First launched in 2011, **bant** is designed to help diabetics closely monitor their glucose levels by connecting their glucose monitor to their iPhone using Bluetooth wireless technology. The user's data is analyzed by the app, which then provides suggestions and reminders about subsequent insulin dosing. The app also connects people with others in the diabetes community.





Take action now on chronic disease prevention and support

It is important that you know the risk chronic disease poses to your organization. Just as important is knowing there is a lot you can do to mitigate this risk and support employees where they need it most.

By cultivating a strong organizational culture of health and taking a strategic approach that targets the physical, mental and financial health risks of your organization, you can make significant strides toward securing a healthy future for your employees and your organization.

For those responsible for employee health management, that first step to addressing the issue of chronic disease can seem overwhelming. But it doesn't need to be. There are resources out there that can help get you started. Talk to your provider about the steps you can begin to take today.

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