



*Consumerism, Self-Care Trends and  
the Broader Value of Employee Health*



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<https://ibiweb.org/tools/full-cost-estimator>.



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# Consumerism, Self-Care Trends and the Broader Value of Employee Health

RECENT FINDINGS FROM THE CENTER FOR WORKFORCE HEALTH AND PERFORMANCE

## Introduction

New research by the Integrated Benefits Institute (IBI) on senior financial executives' perspectives on employee health investing suggests that fewer than half of chief financial officers (CFOs) identify controlling health costs as their primary objective in managing health benefits.<sup>1</sup> For every 10 CFOs who cite controlling healthcare costs as the most important goal, nine identify a *different* goal as most important: keeping employees healthy, attracting and retaining talent, improving productivity or improving business performance. At the same time, CFOs expect their employees to be more engaged in their health and to have "skin in the game."

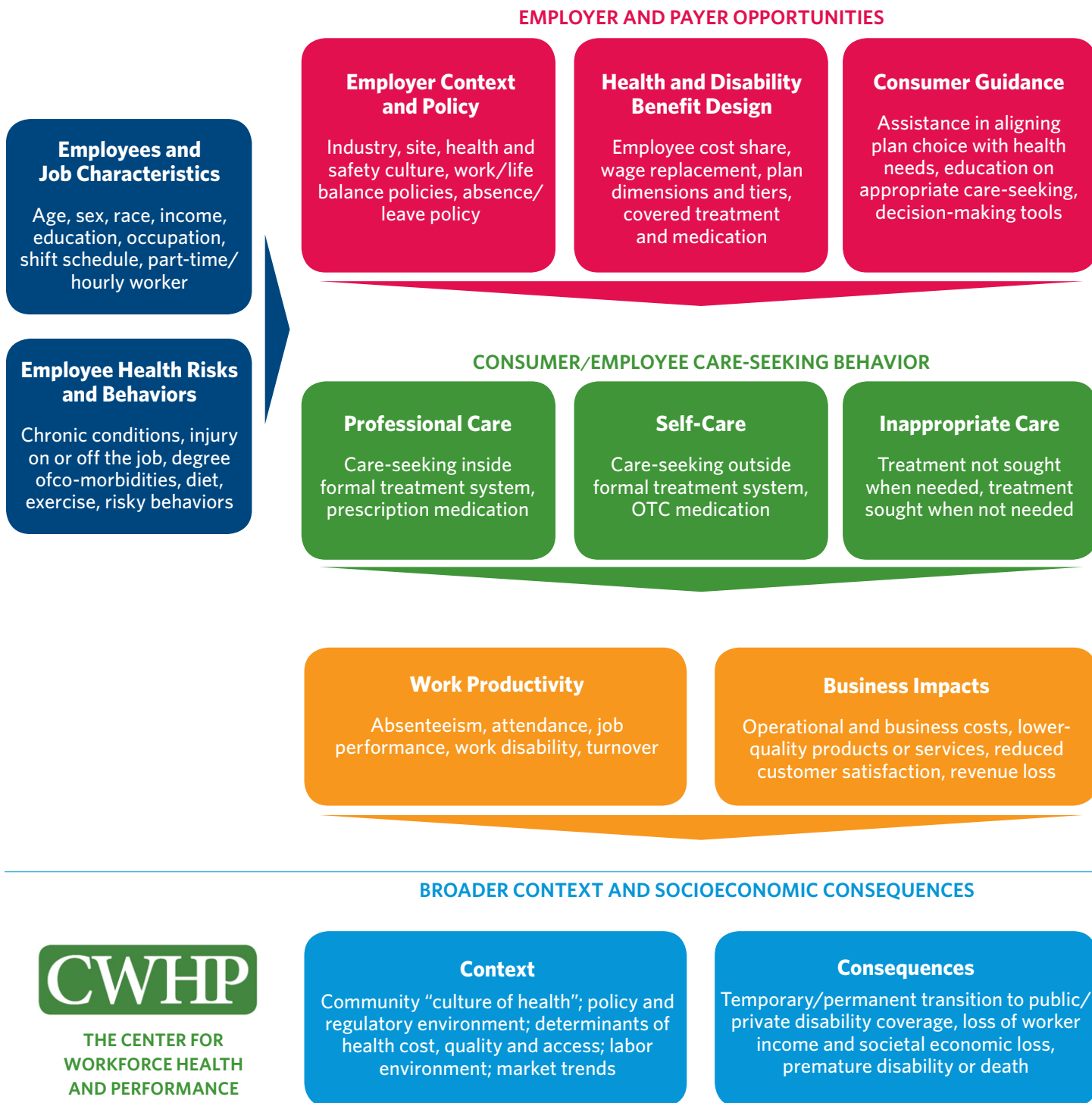
This trend is leading a growing number of employers to adopt high-deductible health plans. The peer-reviewed research on high-deductible plans, however, suggests that consumers may cut back on recommended preventive care.<sup>2</sup> Given the need for healthy human capital and a productive workforce, it is important that employers support employees in finding ways to stay healthy in light of this consumerism shift, including self-care decisions and more-informed use of over-the-counter (OTC) medications.

## *The Broader Value of Employee Health*

To hold down the costs of healthcare benefits, employers are exploring a variety of strategies aimed at making consumers more aware of the costs of their care in order to influence utilization of that care. As depicted in Figure 1, employers have the opportunity to affect the broader value of health through (1) human resources policy, (2) health and disability design and (3) consumer decision-making guidance. These three employer factors influence the extent to which employees choose professional care, self-care or no care and whether such decisions are appropriate. (For illustrative purposes, we define inappropriate care as seeking treatment when it is *not* needed or not seeking treatment when it *is* needed.) Consumer guidance can help employees navigate to appropriate care, whether it is provided through the formal treatment system or through self-care. In addition to the role of employers, employee factors—including sociodemographic background, health risks and behaviors—also influence employee care-seeking behavior.

FIGURE 1

FRAMEWORK FOR EMPLOYER/PAYER INFLUENCES ON EMPLOYEE HEALTHCARE-SEEKING BEHAVIOR



To the extent that individuals are in good health and engaging in appropriate formal treatment or self-care, we would expect their attendance and performance on the job to be higher and their productivity to influence a range of business impacts, including customer satisfaction, better-quality production and service delivery, and lower business costs. This framework is situated within a larger cultural and policy context, and, in totality, the combined factors have profound consequences for the overall socioeconomic well-being of the employee, the employer and society at large.

In this paper, we are principally interested in the connections between chronic conditions, care-seeking behavior, OTC alternatives and potential lost-productivity consequences. Accordingly, we want to understand how some conditions with available US Food and Drug Administration (FDA)-approved<sup>3,4</sup> OTC treatment options might relate to self-care and the broader value of health. We are focused on chronic conditions with FDA-approved OTC medications and whether these conditions are associated with lost work time. In general, we would expect that with access to appropriate treatment, lost work time in the form of absence and presenteeism (i.e., lower job performance) would diminish.

## Data Sources

For this study, we use IBI's Full Cost Estimator (FCE)<sup>5</sup> modeling tool to estimate absence, job performance and lost-productivity costs associated with a range of chronic conditions. We also present the self-reported prevalence and treatment rates for these conditions from the HPQ Select database. Health and Work Performance (HPQ) Select is a shorter version of the validated HPQ.<sup>6</sup>

Self-reported data are an important source of information for assessing the potential for consumers to seek treatment, whether in the formal medical care system, retail clinics or other direct-to-consumer outlets. The FCE reports on the expected total costs of illness for a company of a specific size and industry or, in this case, across all industries in the U.S. economy. The FCE combines all of the major components of health-related business costs—medical, absence, disability, performance and productivity—into a single tool, drawing on national databases, IBI's health assessment survey (HPQ Select) and millions of disability, workers' compensation and Family and Medical Leave Act (FMLA) claims from IBI's benchmarking program.

In this report, we focus on the absence and presenteeism costs associated with 26 chronic conditions. Medical, pharmacy and disability claims costs, as well as lost productivity associated with disability absence, while available in the FCE report, are not currently associated with these 26 chronic conditions in that report.

## Study Findings

Figure 2 displays the results of the FCE report for the U.S. workforce across 26 chronic conditions and symptoms, along with the estimated lost productivity associated with those conditions. Overall, chronic conditions account for \$164.8 billion in lost-productivity costs per year in the U.S. workforce (n = 134,858,380 employees). Approximately 76% of employees have at least one chronic condition. An employee with any chronic condition has an average of three co-morbid conditions. Due to this co-morbidity, the costs in Figure 2 cannot be totaled across rows.

Across all 26 conditions shown, only 28%, on average, of employees' conditions are currently being treated as identified through self-report. Those treatment rates vary considerably across condition, however—from a low of 14% for chronic fatigue to a high of 86% for diabetes. Many of the conditions shown with higher treatment rates—for example, diabetes

osteoporosis, coronary heart disease and hypertension—require a clinical or biometric test result to receive a diagnosis; in this sense, self-reporting the condition is likely correlated with having a test result. In such cases, treatment rates may appear artificially high because those yet to be diagnosed would self-report not having the condition. This is the same problem that arises when medical claims data (i.e., utilization data), as opposed to biometric tests, are used to establish prevalence of conditions in a workforce.

For some of these conditions, OTC treatments are available, according to two FDA lists of approved OTC medications.<sup>3,4</sup> We used these lists to sort the 26 chronic conditions into those with and without FDA-approved OTC remedies, as noted in the far right column (“OTC flag from papers”). Almost half of the conditions—12 of 26—have an FDA-approved OTC drug available, and those 12 represent a considerable amount of lost time and associated lost-productivity costs.



FIGURE 2

**ABSENCE AND PRESENTEEISM COSTS BY CHRONIC CONDITION  
ESTIMATED COSTS FOR U.S. WORKFORCE**

Condition or Symptom	Percentage with condition	Percentage in treatment <sup>a</sup>	Average number of other conditions <sup>a</sup>	Net lost workdays (absence + presenteeism) (in millions) <sup>b</sup>	Net lost-productivity costs (\$ billions) <sup>b</sup>	OTC flag from papers <sup>3,4</sup>
Allergies/hay fever	39.5%	20.9%	3.0	130.9	\$44.9	Y
Chronic back/neck pain	14.3%	28.1%	4.9	128.1	\$42.4	Y
Heartburn/gastroesophageal reflux disease	13.6%	34.7%	4.6	92.6	\$30.5	Y
Obesity	11.1%	15.2%	4.6	92.1	\$31.6	Y
Chronic sleeping problems	6.5%	38.8%	5.7	89.8	\$30.0	Y
Chronic pain	5.6%	30.6%	6.1	60.6	\$20.0	Y
Arthritis	13.5%	22.0%	4.6	57.4	\$19.7	Y
Irritable bowel disorder	6.0%	26.4%	5.3	56.7	\$18.9	Y
Headaches	8.9%	15.6%	5.1	53.3	\$19.1	Y
Migraine	8.9%	22.8%	4.8	48.8	\$16.7	Y
Urinary/bladder problems	4.0%	23.0%	5.4	33.8	\$11.2	Y
Ulcer	2.0%	20.8%	6.0	9.9	\$3.4	Y
Depression	12.3%	39.1%	5.1	265.5	\$87.5	N
Chronic fatigue	11.1%	14.4%	5.5	192.9	\$64.9	N
Anxiety	12.3%	32.6%	4.8	189.9	\$62.9	N
Hypertension	12.4%	72.9%	3.9	56.8	\$17.9	N
High cholesterol	14.4%	46.7%	3.7	55.8	\$19.1	N
Asthma	7.8%	44.2%	4.2	24.6	\$8.5	N
Diabetes	3.2%	86.4%	4.5	17.7	\$5.5	N
Coronary heart disease	0.9%	60.2%	4.9	15.6	\$4.8	N
Cancer	1.8%	27.1%	4.1	12.3	\$3.8	N
Chronic bronchitis/emphysema	0.7%	33.1%	7.8	8.0	\$2.5	N
COPD	0.2%	43.5%	8.5	4.7	\$1.5	N
Congestive heart failure	0.2%	65.5%	7.8	3.5	\$1.1	N
Osteoporosis	0.4%	52.6%	5.5	1.5	\$0.5	N
Skin cancer	1.0%	15.3%	4.5	1.1	\$0.4	N

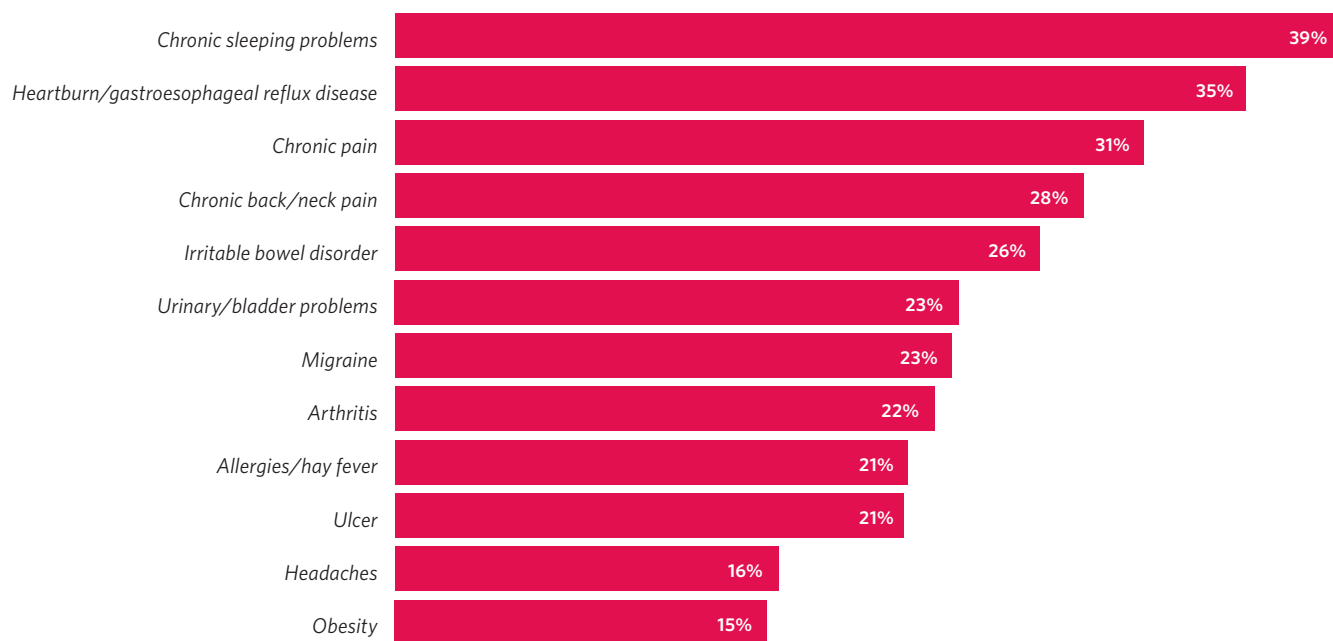
<sup>a</sup> Among workers with the condition.

<sup>b</sup> Compared with employees without the condition.

Source: Estimated costs based on IBI's Full Cost Estimator results for U.S. workforce, November 2015. <http://ibiweb.org/tools/full-cost-estimator>



These 12 conditions associated with FDA-approved OTC medications, as shown in Figure 3, have self-reported treatment rates that range from a low of 15% for obesity to a high of 39% for chronic sleeping problems. Educating consumers about appropriate OTC treatment for these conditions and assisting with access can help fill this self-reported treatment gap.

**FIGURE 3****SELF-REPORTED TREATMENT RATES  
FOR CONDITIONS WITH FDA-APPROVED OTC MEDICATIONS**

## Implications

Ideally, whether the care is appropriate or not would be of primary concern, and utilization would be incentivized accordingly to influence consumers to choose appropriate high-quality care for their own needs, as well as to discourage use of unnecessary or poor-quality care. Whether these changes take the form of consumer-directed health plans (CDHPs), plans with high deductibles and personal health spending or savings accounts, consumer education for self-care or incentives to use OTC treatments, the results often center the decision-making in the hands of patients, with variable levels of advice from healthcare providers (HCPs) either in person, online or through other means. HCPs include physicians, nurse practitioners, pharmacists and other licensed healthcare providers.

The potential impact of increased healthcare consumerism on the health and productivity of the American workforce deserves more attention. Employers and their employees, as healthcare payers and consumers, along with a variety of HCPs may benefit from guidance regarding how a set of chronic conditions is associated with employee health and work-related outcomes, such as absence, job performance and productivity. By doing so, employers, purchasers and consumers can be better informed about the potential impact of self-care decisions on broader health and productivity outcomes.

Individuals seek treatment for two primary reasons: (1) because they have been diagnosed by an HCP with a condition and have been recommended for further treatment and/or (2) because patients themselves experience symptoms and therefore seek care. Individuals may decide to seek care in the formal treatment

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system by contacting an HCP. Alternatively, individuals may seek self-care in the informal treatment system, including the potential use of OTC medications if they believe there are reasonable OTC options to address their symptoms; the options are affordable; and/or they desire timely care (as opposed to waiting weeks or months for an open HCP appointment). Finally, individuals may choose not to seek care in the medical system for financial or other reasons, such as cost avoidance, denial of condition or lack of knowledge of potential disease severity and the need for treatment. If high-quality care is prohibitively expensive or difficult to access, or is perceived to be such, consumers may choose no care or poor-quality alternatives over more-appropriate treatment, as described in IBI's recent review of CDHP effects.<sup>2</sup>

A recent study estimated that OTC drug availability provides \$102 billion in value to the U.S. healthcare system each year, including projected estimates that without OTC medicines, 60 million Americans would not seek treatment for their illnesses.<sup>7</sup> We assessed a wide array of chronic conditions in relation to this treatment decision and how self-care might affect the broader value of health. Research has demonstrated that a range of chronic conditions are associated with medical costs, as well as increased absence and lowered performance on the job, which translate into lost-productivity costs.<sup>8,9,10</sup>

A prior IBI study<sup>11</sup> suggested that treatment status has a significant effect on reducing lost time for a wide variety of chronic health conditions. Plan designs that discourage appropriate care-seeking could exacerbate the underlying condition and associated lost productivity. Research suggests that a focus on functional health, such as function-at-work, may help identify employees in need of treatment (whether formal or informal) before a condition or symptoms become work-disabling.<sup>12</sup>

Given the availability of FDA-identified medications for many of the chronic conditions covered in this paper and the trend toward increasing consumerism in healthcare, self-care and OTC alternatives should be included in any planning around employee health and productivity improvement efforts. With developing market changes shifting costs to consumers, we should expect to see a corresponding shift in self-care trends and direct-to-consumer approaches, supplying information about available treatments in the retail and OTC markets.

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For some conditions involving mild symptom relief without a serious underlying condition requiring formal medical treatment, such care-shifts to consumers may be warranted and, as appropriate, include FDA-approved OTC solutions for treatment. This shift in care to consumers, under such circumstances, is also appreciated by HCPs.<sup>13</sup> Roughly 10% of physician office visits in the United States are considered unnecessary because the conditions can be self-treated with self-care and OTC medicines. A 2011 cost-saving study estimated that avoiding even half of these unnecessary office visits would save the U.S. healthcare system \$5.2 billion annually.<sup>14</sup>

## Conclusions

There should remain no question that employee health is critical to the health of the U.S. economy. Employers are rightly concerned about the rising costs of care, yet their adoption of high-deductible health plans and CDHP plan designs that shift costs to consumers should be mindful of ensuring that appropriate utilization of care is not lowered. We know that chronic conditions are associated with higher healthcare and lost-productivity costs. Obtaining appropriate treatment for symptoms—whether in the formal treatment system or offered through OTC alternatives—should reduce those symptoms and associated costs in both the medical sector and the workplace. It is one thing to avoid unnecessary tests and procedures; but for individuals with chronic conditions, in particular, avoidance of necessary tests, procedures and treatments can be damaging, with long-term consequences.

As consumers face decisions about when to seek treatment, they may obtain a good portion of their education and information from the internet and retail outlets rather than their

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healthcare providers. The field should look to provide education to assist individuals in making smart treatment decisions and support employers in covering appropriate treatment solutions that include FDA-approved OTC alternatives where appropriate.

Whether or not OTC alternatives exist, employees should seek the advice of their HCPs when troubling health symptoms arise. With proper education and guidance, employees might be steered toward FDA-approved OTC treatments that offer symptom relief and would result in a higher level of attendance and performance at work, reduced lost productivity and improved business results.

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