

Taking Action: Using Data to Reduce Employees' Risk for Metabolic Syndrome

For many employers, the rise in metabolic syndrome among employees and their dependents is making a deep impact on health care costs.

Thirty-five percent of U.S. adults suffer from metabolic syndrome, a cluster of conditions that puts them at greater risk for heart disease, diabetes and stroke.¹ Individuals with metabolic syndrome have three of the following five characteristics:

Excess body fat around the waist

Triglyceride levels of 150 or higher

A level of high-density lipoprotein (HDL), or "good" cholesterol, that is lower than 40 in men and 50 in women

A blood pressure rate of 130/85 or higher

A fasting blood sugar level of 110 or more (levels of 110-125 indicate prediabetes)

When these risk factors increase among employees and their dependents, so do employers' health care costs. Nationally, obesity alone has more than a \$2 trillion impact on health care costs.² Medical costs for obese individuals are at least 36 percent higher than for Americans of healthy weight.³ The more risk factors an employee has, the greater the impact on health care costs. Employees who have metabolic syndrome also typically have lower productivity and higher rates of absenteeism.

For employers, using claims data to gauge employees' risk of metabolic syndrome can inform approaches that improve employee health, increase productivity, lower absenteeism rates and reduce health care costs.

35% of U.S. adults suffer from conditions that increase health care costs and absenteeism ^{1,2,3}

Why Claims Data Analysis Is Critical to Addressing Metabolic Syndrome

Measuring the rate of metabolic syndrome among employees can help employers develop targeted interventions that improve employee health and reduce costs. Employers also can use claims data to determine the extent to which employees have health conditions that could lead to metabolic syndrome. With this information, employers can proactively halt the spread of metabolic syndrome by investing in programs and incentives that encourage changes toward healthier behaviors.

Metabolic syndrome is one of the few health conditions that can be reversed with changes in lifestyle or pharmacologic treatment, such as exercise, cholesterol medication and/or a healthier diet. By using claims data to measure the number of employees who have high blood pressure, obesity, high cholesterol and diabetes – as well as the percentage of those who have two or more of these risk factors – employers can better assess risk for metabolic syndrome. A deeper dive into claims data for this population also can reveal the extent to which these risk factors increase employers' health care costs.

For example, one study found people with high blood pressure who are also obese spend about \$1,000 a year more on health care than individuals who don't have these risk factors.⁴ Meanwhile, those who have high blood pressure, obesity, low HDL cholesterol and triglyceride levels of 150 or higher spend about \$1,600 more on care per year, according to the study. In fact, the presence of even one of these health factors increases health care costs, researchers found.

Drilling down into employee claims data gives employers a powerful tool for reducing the proportion of employees who suffer from metabolic syndrome. Employers can use the data to determine:

- Which populations to target.
- The right approaches for intervention (e.g., wellness initiatives designed to help employees maintain a healthier weight, lower their cholesterol or blood pressure, or bring blood sugar levels in line).
- The right incentives to encourage behavior change for improved health.

With actionable insight, the potential to prevent metabolic syndrome for at-risk employees rises. The likelihood of reversing metabolic syndrome among employees who already have been diagnosed with this syndrome also increases.

How Employers Are Using Data to Find Solutions

Employers can learn a great deal about their employees' risk for metabolic syndrome through claims data analysis. Let's take a look at how one national employer's review of medical claims provided the insight needed for action.

A national car retailer partnered with HDMS to evaluate ways to reduce its employee health care costs. Short-term disability claims and employee absences were trending upward, and the company sought to gain a greater understanding of the health conditions and risk factors employees faced.

A claims data analysis showed incidence of metabolic syndrome and risk factors for this syndrome were prevalent among employees:

22% of employees were diagnosed with high blood pressure

13% were obese

10% had high cholesterol

8% had diabetes

In addition, a deeper dive into the data showed the greater the risk factors for metabolic syndrome among employees, the more employee health care costs increased. While the average per member per month (PMPM) costs per employee totaled \$348, the average PMPM cost per obese employee was \$987. Among employees with high cholesterol, average PMPM costs totaled \$1,188.

Costs were even higher for employees with two or more conditions:

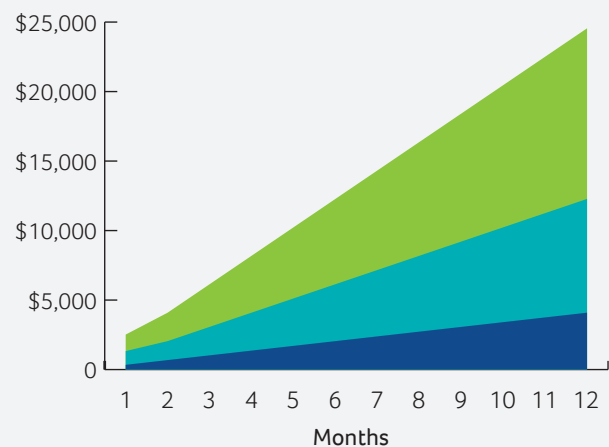
- Employees with both high blood pressure and cholesterol recorded \$1,367 in PMPM costs.
- PMPM costs for those who were diagnosed with all four conditions totaled \$2,033.

Medical costs for employees on short-term disability were 9 percent higher when employees exhibited signs of metabolic syndrome, the analysis showed. Incidence of short-term disability and the duration of short-term disability also rose when claimants had metabolic syndrome, according to the analysis.

Case Study: National Car Retailer Health Care Costs Over One Year

Total aggregated costs per employee over one year.
Based on average cost per member per month.

- Typical Employee
- Obese Employee
- Employee with High Cholesterol



With this information in hand, the company was better positioned to proactively address these health conditions among its employee population. Based on the analysis, the company revamped its health and wellness program to focus on reducing high cholesterol, high blood pressure, body mass index and more.

Within one year, the number of employees at risk for metabolic syndrome dropped 4 percent. Employee absenteeism decreased, reducing labor expenses (such as the expense of replacement labor to cover absences) by \$140,000. Today, the company continues to use claims data analysis to improve employee health and wellness, reduce health care costs and limit the impact of metabolic syndrome on productivity.⁵

Lessons Learned: Improving Health and Wellness Through Data

A data-driven approach to lowering the risk of developing metabolic syndrome can help employers, employees and their dependents find success in better managing their health.

Access to claims data and analysis empowers employers to actively address the health of their employee population. For example, a data-driven approach to improving employee health can be the starting point for creating a healthier companywide culture. It can help establish company-specific health and wellness goals as well as determine incentives that could drive the behavior change needed to lower metabolic risk. It also empowers employers to reduce health care costs by better managing employees' health conditions before they become high-cost conditions.

One of the lessons learned from a data-driven approach to addressing metabolic syndrome is that managing health conditions while they are at the early stage of the “disease

Case Study: National Car Retailer

Results One Year After Claims Data Analysis

4% decrease

in metabolic syndrome risk,
leading to decreased health
care costs

\$140,000

saved in labor expenses
from absenteeism
reduction

pathway” can have a deeper, longer-term impact on employers' health care costs. Many times, employers look to the 5 percent of conditions that comprise 20 percent of health care costs nationwide in determining where to focus health and wellness initiatives. However, by using claims data to dig deeper, such as by determining the conditions most prevalent among employees and developing targeted interventions based on population-specific insights, our experience shows employers are better able to make a more meaningful impact on employee health, productivity, absenteeism rates and health care costs.

Using claims data analysis to address potentially costly conditions before they reach the high-cost stage can set the foundation for a healthier workplace for years to come.

¹https://www.cdc.gov/pcd/issues/2017/16_0287.htm

²<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5409636/>

³<https://www.brookings.edu/research/obesity-prevention-and-health-care-costs/>

⁴<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3125563/>

⁵HDMS proprietary data

About HDMS

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