A Two-Way Street: The Interaction of Personal Financial Stress and Individual Health By Rodman P. Hise

Each year, millions of Americans face unexpected and ongoing health problems that threaten their financial well-being and cause elevated levels of personal financial stress. Alternatively, personal financial stress caused by job loss or other negative financial events is a significant contributor to a broad range of health problems.

This paper details the top three health problems in the United States—and outlines the top 10—to illustrate the scope of their potential impact on the finances of American families. This financial impact could be lessened with debt protection products like credit insurance and debt cancellation.

This paper also explores the potentially positive affect of debt protection products on financial stress and the ill health that can result from it. By helping to prevent or reduce financial stress, these products may work to mitigate the ill health that these stressors promote.

Poor health creates personal financial challenges

Top 10 causes of U.S. deaths (annual) Centers for Disease Control & Prevention (2014)		
1.	Heart disease	633,842
2.	Cancer	595,930
3.	COPD/respiratory diseases	155,041
4.	Accidents	146,571
5.	Stroke	140,323
6.	Alzheimer's disease	110,561
7.	Diabetes	79,535
8.	Influenza and pneumonia	57,062
9.	Kidney disease	49,959

Heart disease remains the leading cause of death in the United States, killing nearly 800,000 Americans each year, roughly a third of the country's annual deaths. The age-adjusted death rate for heart disease declined between 1975 and 2011, but has stabilized since. High blood pressure, high cholesterol, and smoking are the key risk factors for heart disease. Roughly half of all Americans have at least one of these risk factors. One in three adults, or approximately 86 million Americans, suffer from at least one type of cardiovascular disease. In 2010, an estimated \$444 billion was spent on cardiovascular disease treatment, medication, and lost productivity. For example, nearly 735,000 Americans suffer a heart attack each year. The average out-of-pocket expenses for a heart attack are approximately \$1,600.1

Cancer is the second-leading cause of death in the United States. It kills more than 595,00 Americans each year. The age-adjusted death rate for cancer has declined steadily since 2000, but accounted for 22 percent of U.S. deaths in 2015. More than 1.6 million new cases of the disease are reported each year. The most common cancers affect the breasts, lungs, prostate, colon and bladder. Approximately 40 percent of adults will be diagnosed with cancer during their lifetime. Approximately \$125 billion is spent on cancer care each year in the United States. A study funded

by the National Cancer Institute found that the patient share of health care costs in the first month after lung cancer diagnosis alone total up to \$1,500.

Chronic lower respiratory diseases, including chronic obstructive pulmonary disease or COPD, is the third-leading cause of death in the United States. It kills more than 155,000 each year, roughly six percent of all annual deaths in the country. There are more than 3 million new cases of COPD each year and nearly 16 million Americans report that they have been diagnosed with the disease.

The total cost to treat COPD each year in the United States is roughly \$50 billion. According to a study led by Daniel Hilleman, Pharm.D., of the Creighton University School of Pharmacy and Health Professions, data indicate that the total cost of treating an individual case of COPD ranges from \$1,681 per patient per year at stage I to \$10,812 per patient per year for those at stage III.²

Mental health conditions also associated with diminished financial well-being

Depression is the most common mental illness, affecting more than more than 61 million Americans or 26 percent of the U.S. adult population.³ Depression is associated with an increased risk of suicide death and other seemingly unrelated causes of death such as heart disease. According to the federal government's Agency for Healthcare Research and Quality, patients typically bear 16 percent of the total cost of their mental health treatments.

A 2015 study published in the Journal of Clinical Psychiatry found that the direct costs associated with the treatment of depression in the United States totaled more than \$98 billion in 2010. The study also found that the 2008 economic recession made it harder for those suffering from depression to retain their jobs.⁴

Anxiety is a cluster of mental disorders that include panic disorder, generalized anxiety disorder, post-traumatic stress disorder, and others. Anxiety disorders affect more than 40 million Americans age 18 and older or 18 percent of the population.⁵ It is estimated that more than 15 percent of the population will experience some form of anxiety during their lifetime.⁶ Readily-available estimates of the cost to treat the disease don't appear to have been updated for some time.

A study commissioned by the Anxiety and Depression Association of America nearly three decades ago concluded that anxiety disorders cost the United States more than \$40 billion annually. More than half of that cost was associated with repeated use of health care services.⁷

Suicide or intentional self-harm is the 10th-leading cause of death in the United States. There were more than 41,000 suicides in the United States during 2013 or one suicide every 13 minutes. Roughly 1 million Americans attempt suicide each year. Suicide rates have increased nearly 25 percent during the past 15 years.

Suicide results in an estimated \$51 billion in medical and work-loss costs each year. In 2013, nearly 500,000 people were treated in emergency departments for non-fatal self-inflicted injuries. These self-inflicted injuries resulted in an estimated \$10 billion in medical and work-loss costs.

The top three killers in the United States together affect more than 123 million people. These killers cause approximately 1.6 million deaths each year, roughly the same number of people who live in the sprawling city of Phoenix, the fifth-largest in the United States. The expense of treating these and other deadly diseases to patients and their families is considerable and often becomes financially unmanageable for them.

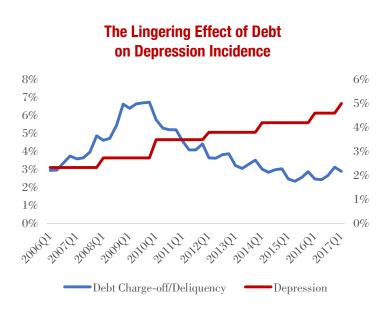
The financial impact of these medical expenses is felt particularly profoundly among those in their mid-fifties and younger. Twenty-two percent of Millennials and 18 percent of Generation Xers have withdrawn retirement funds to cover their medical bills.⁸

These financial burdens can drive a significant increase in personal financial stress. While it is true that poor health and its unexpected effect on financial health can increase personal stress, this street runs both ways. Personal financial stress like that accompanying job loss or debt delinquency can itself cause damage to individual health.

Personal financial stress can cause ill health

Peer-reviewed research, including studies conducted in the wake of the Great Recession that began in 2008, has demonstrated a strong link between financial stress and individual ill health.

Data generated by Burgard and his colleagues showed a clear connection between financial stress and an increase in depression and anxiety. They observed an increase in symptoms of



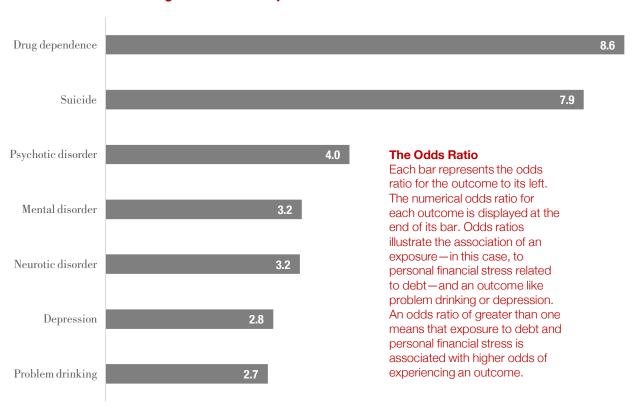
depression and anxiety of up to 30 percent among those who lost their job compared to those who had not.⁹ Studies also have shown a connection between unemployment and increased alcohol and drug use. Popovici and her colleague demonstrated a positive and significant association between job loss during the past year and increases in average daily alcohol consumption, the number of binge drinking days, and the probability of an alcohol abuse, dependence diagnosis or both.¹⁰

Not surprisingly, research also has uncovered strong links between

financial stress and other self-destructive behavior, including suicide. The U.S. suicide rate jumped four percent between 2007 and 2010. Reeves and colleagues applied mathematical models to assess the impact of the increased unemployment rate during that period on the suicide rate.

An analysis by the author that resulted in the graph above titled "The Lingering Effect of Debt on Depression Incidence" illustrates the relationship between debt charge-off and delinquency rates and the incidence of major depression between 2006 and 2017. While those rates, along with the unemployment rate and other economic measures, appeared to improve in the late 2000s, the effects of the Great Recession on individual health continued long after.

Strength of Relationship Between Financial Stress and Health Outcomes



The unemployment rate jumped from 5.8 percent to 9.6 percent during those four years. Reeves' model demonstrated that the rise in unemployment during the recession is associated with a 4.8 percent increase in the suicide rate (over and above the already-increasing rate in the United States before the recession) or about 4,750 suicides that would not have taken place if it weren't for the recession. 11,12

Reeves also has noted that losing a job, having a home repossessed or being in debt are the primary reasons for suicide during an economic downturn. A 2011 study found that business cycles, e.g., recessions and expansions, affected the suicide rate over time.¹³

Personal financial stress and the incidence of depression, anxiety and suicide are not limited to job and income loss. A mathematical analysis published in 2013 that included 65 social scientific papers found significant relationships between debt and mental disorder, depression, suicide completion or attempt, problem drinking, drug dependence, neurotic disorder and psychotic disorders. These relationships are represented in the chart above titled "Strength of Relationship Between Financial Stress and Health Outcomes."

As noted earlier, cardiovascular disease is the leading cause of death for both men and women in the United States. Personal financial stress only exacerbates this national health crisis. Job loss and job insecurity significantly increase the risk of cardiovascular disease.

Involuntary job loss late in life significantly increases the hazards of heart attack and stroke during the decade following the lost job, one study found. Another concluded that self-reported job insecurity in women between the ages of 46 and 71 predicted a doubling of the risk of heart attack during the subsequent two years.

Researchers attribute these poor health outcomes to the direct effects of personal financial stress. But studies also point to declines in individual or family financial well-being that can influence their health less directly.

Those whose personal finances were significantly affected by the Great Recession, for example, may have become too poor to afford medical treatment, leaving serious, sometimes lifethreatening medical conditions undiagnosed or untreated. The U.S. Centers for Disease Control and Prevention found that those who developed serious psychological distress were three times less likely to be able to afford health care and 10 times less likely to be able to afford medication. ¹⁸

Personal financial stress also can affect some generations more than others. The Millennial generation and Generation X were most troubled by financial stress, according to the 2017 PricewaterhouseCoopers Employee Wellness Survey. The survey found that 57 percent of Millennials and 59 percent of GenXers are stressed about their finances. Together, these two generations are comprised of approximately 140 million Americans. Not only were nearly two-thirds of both groups financially stressed, roughly half of both groups said that financial matters are the most significant cause of stress in their life. 19

The survey found that these financially-stressed individuals consistently carry credit card balances (71 percent compared to 46 percent of those who say they are not financially stressed) and find it difficult to make minimum credit card payments on time each month (57 percent compared to 13 percent of those who say they are not financially stressed).²⁰

Optional financial protection products can foster financial peace of mind

Optional debt protection products like credit insurance and debt cancellation are designed to help protect the financial well-being and the resulting peace of mind of consumers. A retired

senior economist for the Federal Reserve Board concluded that "...many borrowers rely on this product for peace of mind."²¹

Peace of mind is a feeling of calm or an absence of worry despite the presence of potential stressors. The peace of mind delivered by debt protection products like credit insurance provides consumers with at least one other fundamental benefit that has not been explored previously. By obviating potential consumer financial stressors, these products may work to mitigate the ill health that those stressors promote.

Debt protection products cover a consumer's debt, either the whole balance or the monthly payments owed to a creditor, when the borrower suffers an unforeseen life event such as death or total disability.

While the most common forms of these products afford protection for death, disability, involuntary unemployment, and damage to personal property, coverage also may be triggered in times of unpaid family leave, hospitalization or nursing home care, marriage, divorce, the birth or adoption of a child, entering college, military deployment, or relocation.

These products provide an affordable way to protect individual or family financial well-being. They are highly accessible and scalable, allowing consumers to buy only the coverage they need. For example, the sum for which a credit life insurance policy is purchased is significantly smaller than those for term life insurance policies. The average face amount of a credit life insurance policy is less than \$6,000. The average face amount of level term life insurance policies purchased during 2015, the last year for which statistics are available, is more than \$160,000, according to the American Council of Life Insurers.

A study released in 2016 by a noted national actuarial firm confirmed that on average, credit life insurance is less expensive than term life insurance. A comparison showed that the average cost of a term-life plan would be about 14 percent higher per \$100 of coverage than the average cost of credit life insurance.

An analysis completed in 2012 by the Federal Reserve Board showed that more than 85 percent of consumers who had purchased a debt protection product were somewhat or very satisfied with that product. Roughly 20 percent of American adults have a purchased debt protection product, including credit insurance, debt cancellation policy, or other products aimed at fostering personal financial peace of mind. ²²

Transamerica, the life insurance and investment company, released a 2014 consumer study that found that 92 percent of consumers who purchased credit life insurance would purchase it again. The same survey showed that 64 percent of consumers who were not offered credit life insurance wished they had been because it would have filled a need for them.²³

Satisfaction with those products and the clear desire to purchase them again is a direct reflection of the peace of mind they deliver. That peace of mind is one of the chief promises of debt protection products, as demonstrated by a sampling of the online marketing of those products.

Customer research conducted by company members of the Consumer Credit Industry Association (CCIA) also illustrate the peace of mind that debt protection products deliver. Several years ago, Helen of Springfield, Missouri, suffered a debilitating stroke. She says, "Debt protection was an integral part of what carried me through the most difficult time in my life."

Pamela of Patton, Pennsylvania, also found peace of mind in her credit insurance, "[Credit insurer] kept this from being a very stressful situation."

Sheliah and her husband are residents of the area in southeast Louisiana that was devastated by floods in 2016. "I will definitely use [the debt protection product] again, for sure," Sheliah says. "I never thought a finance company would help, and then they pay off my loan and give me a check for [the loan cost]. Since then, I have told everybody what a help this has been." Other consumers in the area affected by the flood tell similar stories of the positive impact of debt protection products on their financial well-being.

Michele from Shelby, North Carolina, says of her credit insurance, "I was laid off from my job after 10 years of service. My only source of income is unemployment compensation, which is barely enough to make ends meet. I don't know what I would do if I didn't have [credit insurance]."

Larry of Deadwood, South Dakota, could stay in his home after he was disabled. "This is a great comfort to my wife and me."

The demonstrated diminution of financial stress provided by debt protection products may have a significant favorable effect on personal health. Financial stress has been linked directly to damage to personal health, as we have demonstrated. It also has been shown in this paper that debt protection products provide the consumers who use them with peace of mind.

The conclusion that the use of these products can at least partially mitigate the effects of financial stress and improve personal health is supported by the proven link of that stress to those health conditions. What's more, most of the studies discussed in this paper note the lack of disease in the absence of the stress. (Most of the studies linking financial stress to disease utilize a control group of non-financially-stressed individuals for comparison with the financially-stressed individuals.) Reducing financial stress with debt protection products can improve personal health.

Conclusion

This paper has demonstrated both sides of the connection between personal health and financial well-being. On one hand, unexpected and ongoing health issues can have an enormous impact on a family's finances. The cost to the patient of treating lung cancer, the No. 1 cancer

killer, is up to \$1,500 in the first month alone with continuing costs to the patient in the hundreds or thousands of dollars a month.

On the other hand, we have demonstrated that personal financial stress caused by negative financial events is a major contributor to a broad range of health problems, including many among the top 10 killers in the United States. These killers include No. 1 overall cause of death, cardiovascular disease.

Debt protection products like those identified in this paper and others can be a big part of the solution to either side of the connection between personal and financial health. These products help families cover their debt payments during a stressful time of unexpected or increased medical costs, providing significant peace of mind.

The reduction in personal financial stress and resulting peace of mind that those products provide can, in turn, help to mitigate against the development of significant health problems. Because of the dual role of voluntary protection products, they should play in integral role in any individual or family's approach to managing their personal finances.

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