Ensuring Solutions to Alcohol Problems
THE GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER
Primer 3

A Sound Investment: Identifying and Treating Alcohol Problems

Introduction

The direct cost of alcohol problems is nowhere more evident than in the nation's hospitals and emergency rooms. One-fourth of all people admitted to general hospitals have alcoholism and as many as 30 percent of emergency room patients are problem drinkers, people who may not be dependent on alcohol, but drink in ways that endanger health and well-being. But these individuals are seeking medical attention for alcohol-related illness and injury, not for their drinking. As a result, untreated alcoholism is driving up healthcare costs for both the public and private sector.

Alcohol treatment offers a better way to contain these and other costs associated with problem drinking. Research has demonstrated that it pays for itself in reduced healthcare costs that begin as soon as people begin treatment. Just as significantly for the private sector, alcohol treatment improves an individual's functioning, leading to increased productivity at work.

Yet the nation spends very little to treat alcohol problems. In fact, most private health insurance plans discourage people from seeking alcoholism treatment and invest almost nothing in helping problem drinkers before they become dependent on alcohol.

One look at the economic cost of alcohol problems suggests that the nation, and business in particular, can no longer afford this strategy.

Alcohol problems drain nearly $185 billion from the U.S. economy.

Every year, alcohol problems drain nearly $185 billion from the American economy according to a study commissioned by the federal government. Economists estimated this figure – which is nearly twice California's annual state budget – based on the costs of alcohol-related healthcare, lost productivity, car crashes, property destruction and crime. Healthcare costs alone amount to $26 billion annually.

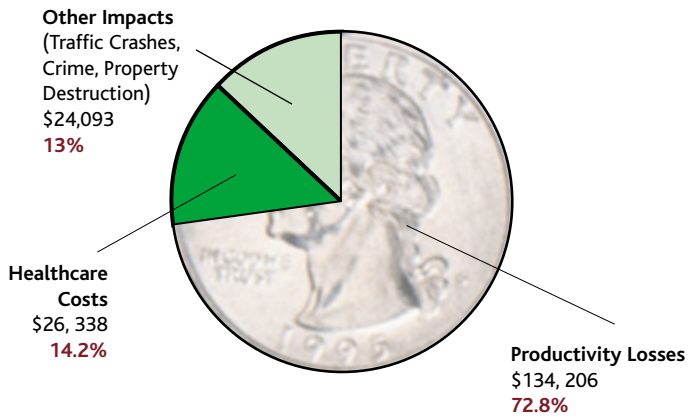
Although this staggering amount comes to $683 for every man, woman and child in the country, it doesn't include the incalculable human costs of alcohol-related problems, including damage to families and careers, or the anguish of seeing a loved one killed or disabled for alcohol-related reasons.

People with alcoholism incur many of these costs. They are more likely to suffer from serious alcohol-related medical complications and their productivity losses are greatest because of illness and premature death. But problem drinkers, people who are not yet physically dependent on alcohol, also contribute to the costs, particularly in the areas of car crashes, productivity and crime.

A loss this large raises a question: who pays? Not surprisingly, people with alcoholism and their families bear the largest portion of these costs. But the rest of society pays, too: federal and state governments take a big hit in smaller tax revenues and private companies pay billions of dollars in health insurance and worker's compensation claims.

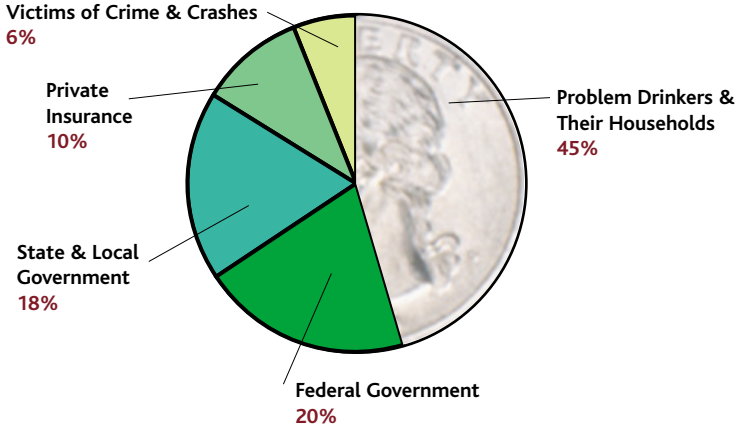
The Cost of Problem Drinking

(in millions of dollars)



Source: Harwood (2000)

Who Pays for Problem Drinking?



Source: NIAAA (2000)

Untreated alcohol problems drive up private health insurance costs for everybody.

Employers are paying higher health insurance premiums than ever before. One underutilized way to help control these costs is to improve access to treatment for employees with drinking problems. While these individuals comprise 7.4 percent of the full-time work force, their alcohol-related illness and alcohol-related injury account for a disproportionate share of emergency room visits and hospital stays.

An Ensuring Solutions to Alcohol Problems analysis of data from National Household Survey on Drug Abuse indicates that, compared to people who don't meet the diagnosis for alcoholism or problem drinking:

- people with untreated alcoholism seek emergency room attention 60 percent more often than the rest of the population;
- people with untreated alcoholism are nearly twice as likely to be hospitalized overnight; and
- people with untreated alcoholism stay in the hospital almost three days longer.

As healthcare becomes more expensive – a day in the hospital now costs on average $1,200 and a single, urgent visit to the emergency room averages $600 – the cost impact of untreated alcohol problems becomes more acute. It will only grow worse.

Treating alcoholism as a chronic disease can save lives and money. By offering comprehensive treatment and ensuring ongoing

Problem Drinking Causes Disease and Injury

DIRECT PRIMARY CAUSES OF DISEASE (AMONG PEOPLE OF ALL AGES)	
Alcohol Poisoning	100%
Alcoholic Heart Disease (cardiomyopathy)	100%
Alcoholic Gastritis	100%
Alcoholic Liver Cirrhosis	100%
Alcoholic Nerve Disease (polyneuropathy)	100%
Alcoholic Psychoses	100%
Alcoholism	100%
SECONDARY CAUSES OF DISEASE (AMONG PEOPLE AGE 35 OR OLDER)	
Cancer	
Lip, Mouth & Pharynx	50% *(men)*, 40% *(women)*
Esophagus	75%
Larnyx	50% *(men)*, 40% *(women)*
Liver & Bile Ducts	15%
Stomach	20%
Diabetes	5%
Gastrointestinal Disease	10%
Heart Disease	
Essential Hypertension	8%
Stroke	7%
Liver Disease	50%
Pancreatitis	
Acute	42%
Chronic	60%
Pneumonia/Influenza	5%
Tuberculosis	25%
INJURIES ATTRIBUTED TO ALCOHOL	
Motor Vehicles	
Fatalities	41%
Injuries	9%
Burns	45%
Drowning	38%
*Falls	35%
*Self-inflicted (including suicide)	28%
*Violence (including homicide)	46%

**Among people ages 15 and older*

Sources: NIAAA (1993); Stinson (1993); NHTSA (2002)

monitoring and counseling to maintain an individual's health, the nation can reduce the $8.3 billion it now spends to hospitalize patients for the medical consequences of their drinking.

Liver disease, which is responsible for much of the alcohol-related illness and premature death that reduces productivity, offers a good example of how limiting alcoholism treatment benefits is likely to cost employers more money, not less. As alcohol-induced liver disease grows more severe, it becomes much more expensive to treat. For patients with cases of end stage liver disease, transplantation – which typically costs more than $300,000 – is the only treatment option. Timely alcoholism treatment can reduce the odds liver disease ever will reach that stage.

The nation spends much more to treat the medical consequences of drinking than it does to treat alcohol problems.

Lack of awareness about problem drinking's contribution to America's healthcare bill may help explain why treatment has remained a low priority. In fact, only three percent of problem drinking's total health bill is spent on treatment. Americans spend twice as much buying chocolate as the country does to treat alcoholism.

Over the last decade, non-public spending on addiction treatment has shrunk by 0.6 percent annually while the healthcare costs for treating the medical consequences of problem drinking have risen by 5.4 percent, according to government figures. And even though 80 percent of heavy drinkers work full- or part-time, treatment for the few people who receive it is rarely paid for by their employers. As a result, less than three million people get the help they need each year.

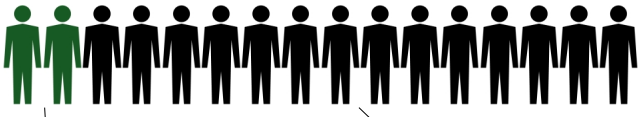
America Spends Too Little on Treatment

Annual Spending on Treatment:
$5.5 Billion

Annual Cost of Alcohol Problems
$177.2 Billion
(less costs for prevention and treatment)

Source: Harwood (2000)

Few Americans Treated for Problem Drinking



2.2 Million Americans
Receive Treatment Annually

13.8 Million Americans
Need Treatment

Sources: NIAAA (1998) Drinking in the United States: Main Findings from the 1992 National Longitudinal Alcohol Epidemiologic Survey; SAMHSA (2002) National Household Survey on Drug Abuse

Alcohol problems cost businesses money.

Alcohol problems have a significant impact on an employer's bottom line in a variety of ways. For example, when they pay employees who miss work due to alcohol-related illness (including severe hangovers) for sick days, employers are incurring direct costs for problem drinking. Poor performance by workers who drink heavily is also an issue. According to a recent analysis by Ensuring Solutions to Alcohol Problems:

- people with untreated alcoholism say they call in sick or skip work an average of 15 days per year, almost twice as often as those who don't have drinking problems; and
- people with untreated alcoholism say that their on-the-job productivity is reduced an average of 13 days each year, almost five days more than people who don't have drinking problems.

Other productivity costs borne by businesses include:

- increased use of worker's compensation and disability benefits;
- accidents and damage;
- increased worker turnover and replacement costs;
- diverted supervisory, managerial and coworker time;
- friction among workers;
- damage to a company's reputation;
- increased liability; and
- theft and fraud.

While these costs are likely to be considerable in the aggregate, little research exists to estimate their dollar value. But they are far higher than the amount businesses are spending to prevent and treat these problems among workers. Developing, implementing and enforcing alcohol policies, testing for alcohol in industries where safety is a concern and use of an effective Employee Assistance Program (EAP) are relatively inexpensive when compared to the productivity losses caused by problem drinking. (EAPs are confidential programs to help with personal and work problems.)

Alcoholism treatment resembles treatment for other chronic diseases.

Research consistently demonstrates that alcoholism treatment offers many benefits to society and is the best way to begin to reduce the cost of problem drinking. Treatment improves the health and functioning of the patient and his or her family, it increases productivity in the workplace and it makes communities safer. But doubts about treatment persist because few people understand alcoholism as a chronic, relapsing disease, with many **similarities** to other illnesses that require ongoing care such as asthma, diabetes and high blood pressure.

Typically, alcoholism treatment consists of short-term detoxification (to help patients remove alcohol and its metabolites from their systems), individual and group counseling to facilitate behavior change and participation in a support group. It takes place in outpatient settings more than 85 percent of the time. Recently, medications to reduce craving for alcohol – a primary symptom of alcoholism and a frequent cause of relapse – have been added to some alcoholism treatment regimens.

Like treatment for other chronic diseases, alcoholism treatment needs differ from patient to patient. People with drinking problems vary considerably in the severity of their addiction and in the health and social factors that may complicate their treatment. Many problem drinkers respond well to short counseling sessions, called brief interventions, but other people may need medical supervision. Inpatient treatment, while requiring a larger investment in the short term, may produce better outcomes for people who have a serious co-occurring medical or psychological problem, such as liver cirrhosis, addiction to another drug or mental illness.

Alcoholism treatment pays for itself in subsequent healthcare cost reductions.

Regardless of variations in patient populations and treatment settings, however, researchers have concluded that alcoholism treatment pays for itself because subsequent reductions in healthcare costs are greater than the cost of treatment.

In the largest study of its kind, researchers tracked for 14 years the healthcare utilization of nearly 4,000 white- and blue-collar employees (or their family members) with alcoholism at a large Midwest manufacturing plant. They were enrolled in either a fee-for-service healthcare plan or a health maintenance organization. The study compared the medical costs of people who received treatment for their alcoholism with those of people who suffered from alcoholism but were not treated.

The study demonstrated that after six months, alcoholism treatment had begun to reduce healthcare costs by as much as 55 percent from their highest pre-treatment levels, even when the cost of treatment was included. On the other hand, the healthcare costs of people with alcoholism who weren't treated continued to rise.

Three years later, the employers continued to see a substantial return on their investment in alcoholism treatment: the healthcare costs of people who received treatment were still 24 percent lower than those of problem drinkers who did not.

This landmark study analyzed healthcare costs only; it did not measure the productivity benefits to employers. Similar studies about the economic impact of alcohol on healthcare costs demonstrate that:

- People with drinking problems use healthcare at twice the rate of people without drinking problems;
- Alcoholism treatment helps to reduce healthcare costs as soon it is initiated; and
- Although alcoholism treatment reduces healthcare costs for most problem drinkers, it results in higher savings among younger problem drinkers.

Alcoholism treatment benefits families and communities.

Living with a person who has a drinking problem can be stressful and sometimes even dangerous. Alcohol often is a factor in domestic violence. Family members may be injured in alcohol-related car crashes or fires. Research also indicates that women who live with problem drinkers are more likely to drink heavily. This increases their risk for alcohol-related medical complications. All of these factors can lead to an increase in healthcare costs for family members of people with alcoholism.

Fortunately, alcoholism treatment can help families, too. Researchers used six years of private insurance claims data in one state to evaluate the impact of treatment on 90 families, each of whom had at least one member with alcoholism. Following treatment, family members sought medical attention less often than they had in the year before their loved one got help, reducing the overall healthcare costs for their employer. Within four years, their healthcare needs and costs were similar to those for families who never suffered from the many debilitating problems that alcoholism causes.

The major benefits of addiction treatment – improved social functioning for individuals and families, reduced healthcare costs for employers and significant decreases in crime – have been demonstrated repeatedly. A recent literature review of nearly 50 studies found returns ranging from $4 to $23 for every dollar invested in treatment.

Another critical finding from the research shows that the longer people are able to continue addiction treatment, the greater the overall return on treatment costs. Treating alcoholism as a chronic disease, instead of an acute illness, can improve individual lives, families and communities over the long term while saving money at the same time.

Greater investments in alcoholism treatment can yield greater returns.

Researchers, using data from Project Match, the largest study of alcoholism treatment ever conducted by the federal government, now have begun to compare the cost effectiveness of various kinds of treatment. Among other things, Project Match demonstrated that several different therapeutic approaches were effective in helping patients to stop drinking, though one cost half as much as the other two.

Cost effectiveness, however, should not be the only measure used to evaluate alcoholism treatment. A cost-benefit analysis of the same data indicated that the more expensive approaches had greater potential for reducing post-treatment healthcare costs for those patients with the poorest prognoses. This group included people with severe alcoholism or co-occurring mental illness and people whose social support groups encouraged drinking.

Determinations about how to treat alcoholism cannot be made on the basis of cost effectiveness alone. Decision makers must take into account the evidence that alcoholism treatment leads to healthier individuals, happier families and safer communities.

Confidential alcohol screening and brief intervention offer additional dividends.

Early identification is critical in the treatment of any chronic disease. Investing in **alcohol screening** and **brief interventions** offers business leaders and policy makers another way to reduce the economic and social costs of problem drinking, which occurs along a **continuum**.

While the cost effectiveness of brief interventions is a relatively new area of research, the *Journal of the American Medical Association* recognized their economic potential in1997 when it published the results of a study announcing "the first direct evidence that physician intervention with problem drinkers decreased alcohol use and health resource utilization in the U.S. healthcare system."

In this study, researchers at the University of Wisconsin used alcohol screening to identify more than 750 problem drinkers in primary care clinics, half of whom were given brief interventions at a cost of $166 each. Within one year, these interventions produced healthcare cost savings of $523.

Four years later, these interventions were still producing a return on investment. Among the patients had who received brief interventions:

- Overall healthcare costs had decreased by a total of $712;
- The number of visits to the emergency room declined by 20 percent; and
- The number of days spent in the hospital declined by 37 percent.

While further research about alcohol screening and brief intervention will be necessary to determine their cost effectiveness on a larger scale, their benefits, like those of alcoholism treatment, are already evident: in a four-year follow-up with participants in the University of Wisconsin study, researchers discovered that problem drinkers who did not receive brief interventions had more traffic fatalities, 55 percent more crashes with nonfatal injuries, as well as 46 percent more arrests.

The solutions to alcohol problems are much less expensive than the costs.

The nation clearly pays a huge price for alcohol-related problems. That cost is unnecessarily high, however, and will remain so until the country makes more progress in treating people with alcoholism and intervening with problem drinkers before they become dependent on alcohol.

Business, in particular, has much to gain by pursuing this strategy in the workplace. As it stands now, alcoholism treatment accounts for such a tiny fraction – most estimates suggest less than 0.1 percent – of employer healthcare costs, that business may be overlooking its considerable potential to reduce healthcare costs and improve productivity.

In fact, most employment-based health insurance hinders people from being treated successfully for alcoholism and other drug addictions:

- It imposes lifetime limits on episodes of care even though addiction to alcohol is a chronic, relapsing disease like asthma, diabetes and high blood pressure.
- It limits how much treatment people with drinking problems can receive even though research indicates that greater length of treatment improves outcomes.
- By making people with drinking problems pay more out of their own pockets for treatment, insurance companies discourage patients from seeking help.

It wouldn't cost employers much to lift these restrictions. Addiction to alcohol and other drugs can be covered in a managed care plan to the same extent as other medical conditions for as little as $5.11 per member per year.

Providing equitable coverage for alcoholism treatment is extremely important but it isn't the only strategy business should consider. Today employers are searching for innovative ways to control healthcare costs. Many have found that disease management programs for chronic conditions such as diabetes have reduced spending. This approach easily could be adapted to problem drinking.

Inexpensive, voluntary disease management programs will allow employers to adopt a more proactive approach to problem drinking by putting it in a medical context. Instead of waiting for workers to recognize that they have a problem or relying on supervisors to refer workers to an EAP, disease management programs can use confidential alcohol screening questionnaires to diagnose alcohol problems among workers earlier than ever. Many of these individuals would benefit from brief

interventions to help them cut back on their drinking; individuals already addicted to alcohol would be referred to an appropriate level of treatment. Disease management also can facilitate continued monitoring of these individuals by healthcare professionals to minimize the possibility of relapse.

Human capital is one of the most valuable assets of American business. Equitable coverage for alcoholism treatment and disease management programs to reduce problem drinking offer employers an integrated opportunity to reduce their overall healthcare costs and improve worker productivity. Investing in this strategy can provide great returns for business and the nation.

Recommendations for action:

Policy makers

Millions of Americans need treatment for alcoholism. But whether they get it depends on where they live and where they work. In fact, less than 3 million people in the United States receive treatment for alcohol problems each year

Elected and appointed officials and other government representatives can help by learning more about how alcohol affects society; how to curb the social and economic costs of untreated alcohol problems, and what obstacles to treatment people with alcohol problems face. Ensuring Solutions to Alcohol Problems offers many resources on these issues; local advocacy groups can also help.

Click here for actions that policy makers can take.

Business Leaders

Health care costs for employees who have alcohol problems are about twice as high as for the average employee. Since more than 7 percent of full-time 18- to 49-year-old workers had drinking problems during the past year, treating alcohol problems can curb health care costs and boost productivity. The Ensuring Solutions **The Alcohol Cost Calculator** computes company-specific information about the extent and cost of alcohol problems in your workforce.

Click here for actions business leaders can take.

Concerned Citizens

About one of every 13 adults has a serious problem with alcohol, yet only 2-3 million get help every year. Learn more about how alcohol affects family members, coworkers and neighbors and how to curb the social and economic costs of untreated alcohol problems.

Click here for actions concerned citizens can take.

Expert Consultant: Henrick Harwood

Since 1992 Henrick Harwood has been a vice president at the Lewin Group, based in Falls Church, Virginia, which provides strategic and healthcare policy consulting for public, nonprofit and private sector organizations. He has more than 25 years of experience in the economics and policy of substance abuse and mental health. Harwood recently completed national studies of the economic costs of alcohol, drug abuse and mental illness, respectively, for the National Institute on Alcohol Abuse and Alcoholism, the National Institute on Drug Abuse and the National Institute on Mental Health. Previously, he served in the Office of National Drug Control Policy/ Executive Office of the President, at the Institute of Medicine/National Academy of Sciences, and at Research Triangle Institute.

Harwood has held adjunct faculty appointments at Duke University and at Erasmus University in Rotterdam, the Netherlands. He received a B.A. from Stetson University and performed graduate studies in economics at the University of North Carolina, Chapel Hill.

Special Thanks

Special thanks to Herman Diesenhaus at the Substance Abuse and Mental Health Services Administration, US Department of Health and Human Services; Eric Goplerud at Ensuring Solutions To Alcohol Problems; Mandie Hajek at Mercer Human Resource Consulting; Norman Hoffmann at Evince Clinical Assessments; Stacia Murphy at the National Council on Alcoholism and Drug Dependence, Inc.; David Rosenbloom at Join Together; and Patricia A. Taylor at Ensuring Solutions To Alcohol Problems for their thoughtful review of this material.

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April 2003

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Ensuring Solutions to Alcohol Problems (Ensuring Solutions) at the George Washington University Medical Center in Washington, DC, seeks to increase access to treatment for individuals with alcohol problems. Working with policy makers, employers and concerned citizens, Ensuring Solutions provides research-based information and tools to help curb the avoidable health care and other costs associated with alcohol use and improve access to treatment for Americans who need it. The project is supported by a grant from The Pew Charitable Trusts.

Suggested Reading

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