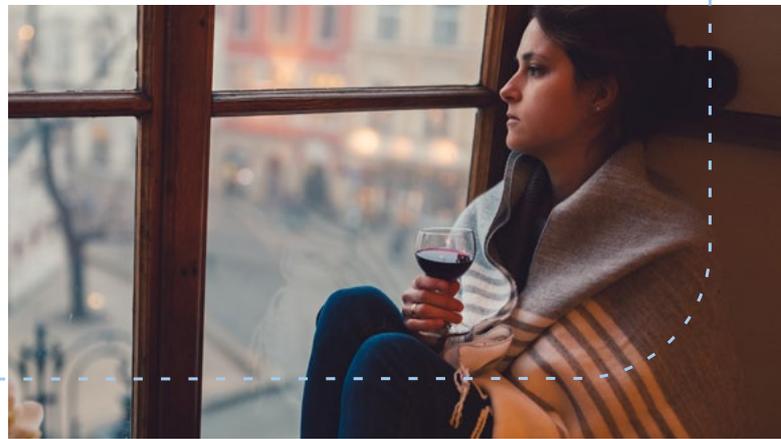
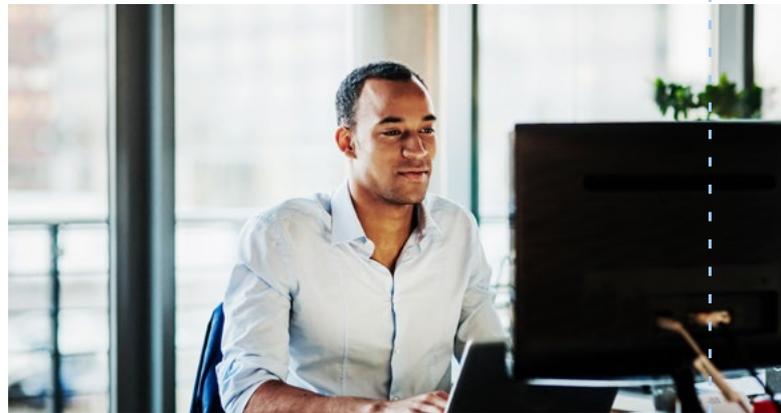


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The Toll of Addiction in the Workplace:

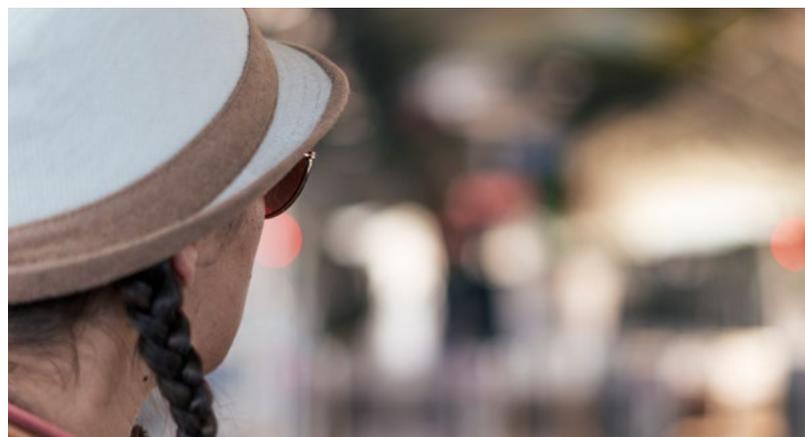
Employer Strategies to
Combat Substance Use Disorders
and Lower Costs

The Toll of Addiction in the Workplace:

Employer Strategies to Combat Substance Use Disorders and Lower Costs

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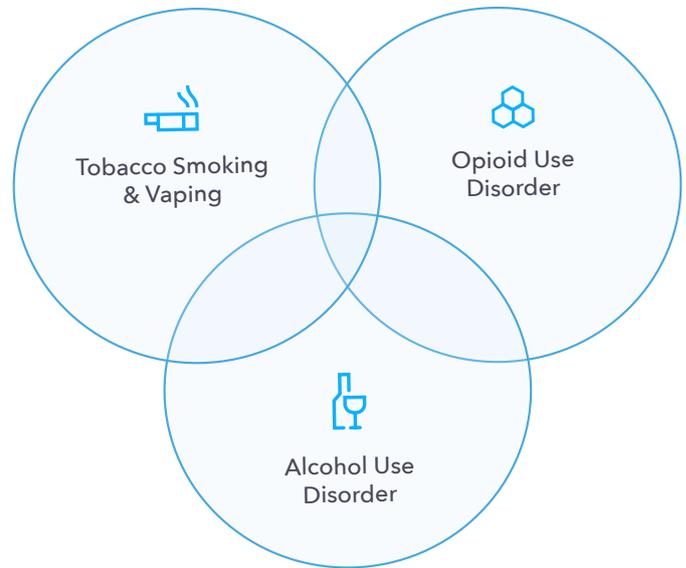
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Substance use disorders arising from the risky use of tobacco, alcohol, prescription pain medications and other drugs are among the most common and costly health conditions affecting the American workplace today.

While the impact of addiction to people and their lives is clear, addiction has become a major business issue as well, since addiction to multiple substances is one of the most significant drivers of medical spend among employers. Overlapping addictions are quite common and can have multiple health implications. The trends are frightening:



70%

There is a 70 percent chance that someone with an alcohol use disorder also smoke.

18%

There is an 18 percent chance that if someone smokes, they also have an opioid use disorder.

22%

For those with opioid use disorders, there is a 22 percent chance they also have an alcohol use disorder.

While organizations may act with the best of intentions to help employees struggling with mental health and substance use disorders heal, the traditional approaches they employ are either ineffective or too costly when used out-of-network.

The impact of COVID-19 on those with Substance Use Disorder

Compounding the addiction problem has been the arrival of an unprecedented pandemic that roared onto America's shores in March 2020 - COVID-19.



The headline, "Coronavirus crisis disrupts treatments for another epidemic: addiction" ran in Kaiser Health News during the Spring of 2020.

It aptly describes the impact the coronavirus pandemic has had on America's addiction problem.

As a way to cope with the stresses of COVID-19, many Americans have turned to alcohol and drugs. In fact, in some states, liquor stores have been considered an essential service. As a result, Marketwatch.com has reported that online alcohol sales have jumped a whopping 243 percent. Unfortunately, alcohol and drugs will only provide temporary relief.

The social isolation and stress brought on by the pandemic has increased susceptibility to substance abuse, addiction and relapse. As we continue to grapple with the realities of COVID-19, people who smoke or vape, use opioids or have other substance use disorders (SUDs) have become more vulnerable, as direct challenges to respiratory health cause those with SUD to be particularly susceptible to infection by the coronavirus and its associated complications.

COVID-19 poses an immediate and long-term threat, not only to global health but especially to those with addictions. This threat is the result of both the virus itself as well as the consequences of physical distancing and the limitations that have been placed on accessing treatment and recovery resources that are needed now more than ever.

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The need to act now to treat Substance Use Disorders

Without taking purposeful action today, the resultant healthcare costs for addictions, including those exacerbated by the pandemic, will escalate into a tidal wave that will substantially impact organizations and individuals already reeling from the dual effects of SUDs and COVID-19. Without a doubt, as has been the case in prior pandemics, the behaviors of today will become the addictions of tomorrow.

“Without a doubt, the behaviors of today will become the addictions of tomorrow.”

This white paper aims to shine a light on the financial and business toll of addiction to employers, including the rising costs of addiction relative to healthcare, productivity and absenteeism, and explores treatment options available to help employers determine the best strategies for combatting addiction in their organizations.

Addiction in the Workforce

When most of us think of a person with a substance use disorder, the first image that usually comes to mind is that of someone who is dysfunctional and clearly seems to neglect self-care. But the reality is, there are many individuals with substance use disorders who don't fit the stereotype. In fact, 78 percent of adults with an alcohol use disorder and 68 percent of people who misuse pain medication are in the workforce. Addictions are among the most common and costly health conditions affecting Americans. And, the cost burden to employers continues to escalate.

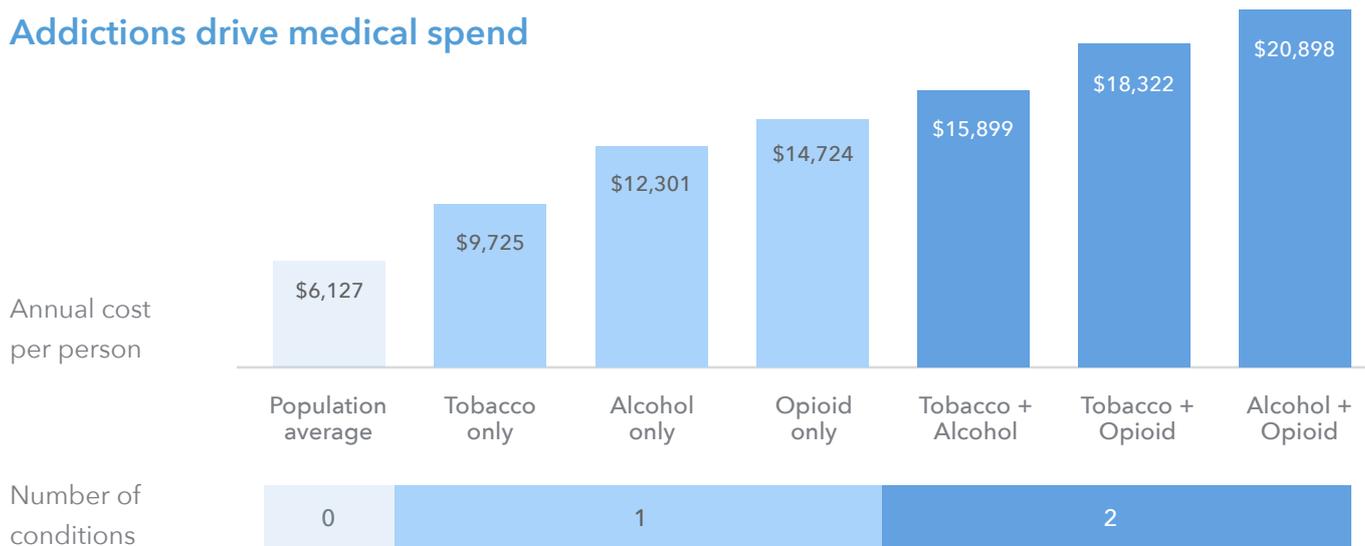
While employers who self-insure and provide individual coverage pay an average of \$1,729 per employee with no substance use disorder each year, the average employer cost for a worker with a substance use disorder who uses healthcare services is \$2,197. The difference between the two costs is the result of greater hospital Emergency Department use among employees with addictions. Despite estimates of national costs exceeding \$400 billion annually for employees with addictions, many business leaders are largely unaware of how addiction impacts their organizations and ultimately, what they can do to reduce the risks and costs to their bottom line.



“ Addictions are among the most common and costly health conditions affecting Americans. And, the cost burden to employers continues to escalate.”

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Addictions drive medical spend



The Employer-Facing Cost Burdens of Addiction

Healthcare (including Mental Health) Expenses

The U.S. Surgeon General reported that collectively, roughly \$85 billion is spent to treat injuries, infections and illnesses associated with risky and dependent substance use. Although employees with any substance use disorder report greater healthcare use than their peers, costs rise significantly for workers with a pain medication use disorder, who are more than twice as likely as their peers to have been hospitalized in the previous 12 months, and stayed in the hospital more than twice as long. No other substance use group shows such a great difference in hospital use. In addition to increased hospitalizations, workers with addictions to prescription opioids utilize hospital Emergency Department services more than four times as often as workers with no SUD or those in recovery.

Adding to the healthcare cost burden are mental health issues. People with addictions suffer from serious psychological distress, depression and anxiety - particularly those with a prescription opioid use disorder. These workers also stand out relative to suffering serious distress, which they report seven times more frequently than their

peers without an addiction. And, while workers with addictions are usually twice as likely to suffer from depression and anxiety as their peers, those with addiction to prescription opioids are four times more likely to experience these ailments. It is estimated that 37 percent of American adults (more than 9 million) struggle with both a substance use issue (alcohol or drugs) and a mental illness. On top of that, drug use, and the related healthcare claims, are increasing among young people age 18-26 (who may still be dependents on their parent's health insurance). In fact, according to the National Institute on Drug Abuse, more than 40 percent of high school seniors vaped in the past year.

Lost productivity and absenteeism

Overall, lost productivity as the result of substance use disorders cost employers \$25.5 billion annually. The cost of addiction is amplified through worker distraction and productivity lost. The typical worker misses about two weeks (10.5 days) of work annually for illness, injury or reasons other than vacation and holidays. But workers with a SUD miss nearly 50 percent more days than their peers, averaging nearly three weeks (at 14.8 days/year). Workers with pain medication use disorders are absent nearly three times as much - nearly six weeks (or 29 days). Most of these extra days of missed work are associated with injury, adding up to more than 22 days annually.

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In addition to being inconvenient, absenteeism creates serious issues for productivity. Employers may need to incur additional costs (such as hiring substitutes or adding to the workload of other workers) to ensure the work is completed as needed.

Low morale and turnover

If employees are using drugs in the workplace, the chances are high that employee morale and the company culture will suffer. Usually, employees who are absent as the result of an addiction are less productive and behave erratically at work. In turn, this tends to make others in the workplace resentful.



Turnover is another significant issue impacting employer costs. While 25 percent (one quarter) of employees are much more likely than their peers to report having more than one employer in the previous year, this number rises to 36 percent among workers with SUDs. And, workers with prescription pain medication use disorder were even more likely to have more than one employer in the previous year (42 percent.)

Productivity losses are common when people frequently change jobs and onboarding new employees must occur. Replacing workers is expensive. To recruit and retain employees for a vacant position, the cost burden to the employer is around 21 percent of a job's annual salary.

Disability and Workers' Compensation

Drug and alcohol abuse in the workplace are the cause of 65 percent of on-the-job accidents, according to the U.S. Department of Labor. In addition, 50 percent of all workers' compensation claims are related to the abuse of alcohol or drugs in the workplace.

Employer Costs by Substance Use Disorder

Let's examine employer costs for several of the most widespread substance use disorders:

Tobacco

The average smoker costs their employer approximately \$6,000 a year in excess medical bills and lost productivity, according to researchers at Ohio State University. Over \$3,500 of that is in medical expense specifically.

Although cigarettes satisfy a smoker's need for nicotine, the effects wear off quickly, and a smoker may feel the symptoms of physical and psychological withdrawal within 30 minutes of their last puff. Now that a vast majority of workplaces are smoke-free, the need for frequent cigarette breaks diminishes a smoker's productivity at work.

Smoking leads to excess healthcare expenses because of its strong and undeniable link to illnesses such as cancer, heart disease, lung disease, diabetes, and Chronic Obstructive Pulmonary Disease (COPD), which includes emphysema and chronic bronchitis. Smoking also increases the risks for tuberculosis, certain eye diseases and immune system problems, including rheumatoid arthritis, all of which will drastically increase an employer's long-term healthcare costs.



“ Now that a vast majority of workplaces are smoke-free, the need for frequent cigarette breaks diminishes a smoker's productivity at work.

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Alcohol

The per employee cost of alcohol use disorders is \$12,301; collectively, alcohol use creates a \$249 billion cost burden for employers. This burden comes not only from those with an alcohol use disorder but is largely connected to binge drinking and those who engage in risky drinking behaviors.

Of this total:

- 72 percent of costs are the result of losses in workplace productivity
- 11 percent result from healthcare costs associated with health problems caused by excessive drinking

These health problems create both short-and longer-term health risks:

- Short-term, excessive alcohol use has immediate effects that increase the risk of a variety of harmful health conditions, including:
 - Injuries from motor vehicle accidents, falls and burns
 - Violence, including homicide, suicide, sexual assault and intimate partner violence
 - Alcohol poisoning, a medical emergency resulting from high blood alcohol levels
 - Risky sexual behaviors that can result in unintended pregnancy or sexually transmitted diseases, including HIV
 - Miscarriage and still birth among pregnant women

\$12,301

per employee cost of alcohol use disorders

\$249 billion

cost burden for employers

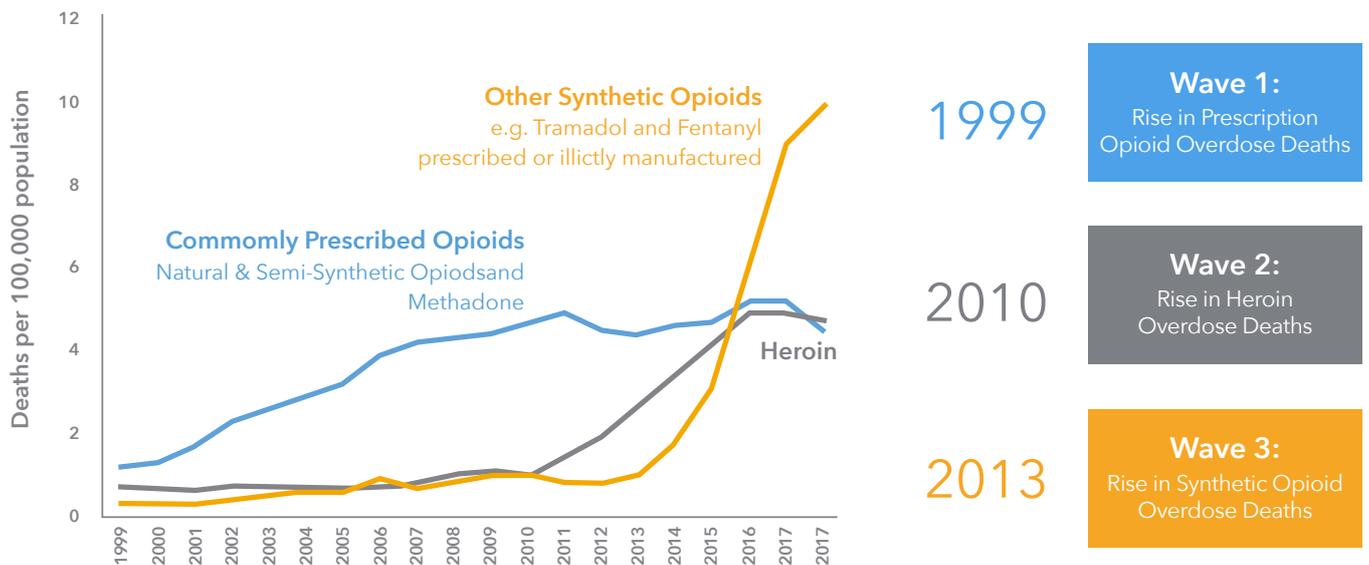


Excessive alcohol use can lead to the development of chronic disease and other serious problems.

- Over time, excessive alcohol use can lead to the development and exacerbation of chronic disease and other serious problems that include:
 - High blood pressure, heart disease, stroke, liver disease and digestive disorders
 - Cancers of the breast, mouth, throat, esophagus, liver and colon
 - Weakening of the immune system, which increases one's chances of illness
 - Learning and memory problems, including dementia
 - Mental health problems such as depression and anxiety
 - Social problems
 - Alcohol use disorder

People with alcohol use disorder skip work an average of 15 days per year, almost twice as much as those with no known alcohol use disorder. It's important to note that rarely does alcohol use disorder occur in isolation. Rather, it more commonly exists with other mental and physical health disorders.

3 Waves of the Rise in Opioid Overdose Deaths



Opioids

The National Safety Council reports that, while 75 percent of U.S. employers say their workplaces have been directly impacted by opioid use, only 17 percent feel well prepared to deal with this issue. Opioid use disorders often begin when opioids are prescribed for medical reasons like chronic pain and to support recovery from surgery. But opioids have a very addictive nature. Opioid use disorder is both widespread and extremely costly for employers, with an annual per employee spend of \$14,724.

The overdose crisis is driven by three categories of opioids: prescription painkillers (for example Vicodin, Percocet, and OxyContin), heroin and fentanyl (illicit opioids). Any opioid can cause impairment, dependence and addiction, even if taken as prescribed. From 2011 to 2018, the primary driver of opioid overdose deaths shifted from prescription painkillers to heroin, and then to fentanyl and other synthetic opioids. Many of these overdose deaths also involved other drugs or alcohol. This is because people switching from prescription opioids to heroin do so because it is cheaper and easier to obtain when prescription opioids aren't accessible. This is important because employers often (wrongly) believe that

they have solved the problem by having their PBM add restrictions on script refills. This graph from the CDC, 3 Waves of the Rise in Opioid Overdoes Deaths, provides an excellent visual of this point.

Undeniably, the U.S. is in the midst of an opioid overdose epidemic. More than 232,000 Americans lost their lives to overdoses involving prescription opioids from 1999 to 2018. And, nearly 70 percent of the 67,367 drug overdose deaths in 2018 involved an opioid, making drug overdoses from opioids a leading cause of injury-related death in the U.S.

In addition to fatalities, opioid overdoses can lead to a loss of consciousness, brain damage and cardiac arrhythmias. Fatalities can also result indirectly from accidents and injuries related to being under the influence of opioids.

Opioid use disorders can generate excessively high healthcare costs for employers:

- Workers with pain medication use disorder cost employers more than twice as much per year (\$5,586) as workers with no SUDs.
- People with pain medication use disorder are more than twice as likely as their peers to have been hospitalized, and their stay is twice as long as those without a SUD.

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In addition to healthcare, additional employer costs associated with opioid use disorders include:

- Workers' Compensation - employees who were prescribed even one opioid pill were found to cost four times more in workers' compensation claims than those who weren't prescribed any.
- Missed worked days and lost productivity from the misuse of prescription pain killers cost employers an estimated \$25.6 billion a year.

The cost equation is magnified when employees have more than one substance addiction, which is common.

Available Addiction Solutions

When you consider the substantial financial and operational burden imposed on employers by substance use disorders, as well as the emotional and social toll of addiction in the workplace, providing the right support for employees can help alleviate the overall cost burden and extend benefits throughout the workforce.

Helping employees get into recovery has a drastic impact on productivity and healthcare costs. Consider the following:

- Healthcare utilization and costs are lower for workers in recovery than for workers with an untreated SUD by an average of \$536 per year. In fact, workers in recovery have the lowest hospital use of any group, according to NCBI.
- Workers in recovery take much less unscheduled leave than their peers with untreated SUDs. In fact, workers in recovery take even fewer days of unscheduled leave than workers who never had a SUD.
- Workers in recovery also miss work a week less than workers with a SUD, and a day less than workers who never had a SUD.
- Workers in recovery are the group least likely to leave their employers. Their turnover rate is much lower than workers with untreated substance use, and even lower than their peers with no SUD (21% vs 25%).

// Workers in recovery take much less unscheduled leave than their peers.



While the cost of addiction treatment varies between options, cost considerations should include whether treatment is part of an outpatient or inpatient program, and the type of substance use disorder being treated.

Following are several known treatment options:

Employee Assistance Programs (EAP) and Wellness Programs

Employee Assistance Programs (EAPs) can be helpful but are severely under-utilized. Telephone coaching experiences similar utilization problems and is also episodic in nature. The drawback is that employees are allotted one call per month, with a maximum of four to five calls in total, but successfully managing an addiction requires much more treatment than that. Wellness programs, even though they've been widely used for tobacco cessation, yield poor results because of their low-intensity nature and symptomatic (rather than holistic) approach.

Alcoholics Anonymous (AA) or Narcotics Anonymous (NA)

Alcoholics Anonymous and Narcotics Anonymous are 12-step facilitator (TSF) programs that are the most universally accepted standard for addiction recovery in America.

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While 12-step programs have a reputation as a highly successful approach for supporting individuals with substance use disorder, there is some debate as to their efficacy. Because of its anonymous nature, AA is quite challenging to study; data to date has shown that it can be helpful as a means of providing social support and that participation improves outcomes for those who are receiving other evidence-based treatments, especially when people become very engaged with the program and complete the 12 steps. However, it does not work for everyone. In their book, "The Sober Truth: Debunking the Bad Science Behind 12-step Programs and the Rehab Industry," Dr. Lance Dodes and co-author Zachary Dodes report that AA only works for a small subset of people. They note that, while 33 percent of AA members say they've been sober more than a decade, this doesn't take into account the large number of persons with alcohol use disorder who never make it through their first year of meetings and never complete the 12 steps (roughly 40 percent) the definition of success by AA's standards.

Medication

Medications are administered for substance use disorders to help suppress withdrawal symptoms during the detoxification process and re-establish normal brain function and lessen cravings.

- For individuals with **opioid** use disorders, the most common medications are methadone, buprenorphine and naltrexone.
- For **nicotine** use disorders, medications can either be over-the-counter (e.g. nicotine replacement therapies in patch, spray, gum and lozenge applications), as well as prescription (e.g. bupropion (Zyban) and Varenicline (Chantix).) Both prescription medications help prevent relapse in people trying to quit tobacco.
- Naltrexone, Acamprosate and Disulfiram are the three most common medications to treat persons with **alcohol** use disorder.

"CBT can help with identifying risky situations and how to prevent them, and how to prevent relapse."

Therapy

Addiction is a complex disease that can affect many areas of a person's life. It requires individualized treatments that address the symptoms and underlying causes of the disease, as well as the consequences addictions have in different areas of one's life.

Treatment for addiction commonly consists of a combination of medication and behavioral therapy sessions that focus on teaching those in recovery the skills needed to get and stay sober, including how to navigate various situations without the use of drugs or alcohol.

Perhaps the most commonly used treatment component of substance rehabilitation is behavioral therapy. This therapeutic approach has been adopted into a variety of effective techniques that include:



- **Cognitive Behavioral Therapy (CBT)** - Cognitive Behavioral Therapy is based on the premise that people can learn to recognize and change their maladaptive behaviors. CBT can help with identifying risky situations and how to prevent them, and how to prevent relapse.
- **Contingency Management (CM)** - The main benefit of CM is that it can result in the reduction of its two biggest treatment issues: dropping out and relapsing.
- **Motivational Interviewing** - This type of therapy provides a method for resolving ambivalence in recovering individuals in order to embrace their treatment efforts to affect change and can provide the patient with more of a sense of control over their treatment.

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Inpatient Treatment

During inpatient treatment, sometimes referred to as 'residential treatment', the patient remains in a substance-free facility throughout their treatment where they receive round-the-clock medical care and therapeutic support that addresses all facets of their substance use disorder. Inpatient rehab tends to be expensive. Some in-patient rehab centers cost \$5,000 for a three-month program, while well-known centers often cost up to \$20,000 for a 30-day program. The costs for people requiring 60- or 90-day programs could range from \$12,000 to \$60,000.

Outpatient Treatment

Outpatient treatment offers the same kind of effective treatments and therapies as inpatient but allows the patient to live at home during the recovery process. Patients can continue working and caring for their families while attending scheduled treatment sessions throughout the week.



Some patients enter outpatient treatment after having completed inpatient detoxification or residential treatment, and others select this level of care with or without medication to meet their treatment needs. Some outpatient services may cost \$5,000 for a three-month program. Other outpatient programs at well-known facilities can cost \$10,000. The total cost for outpatient treatment depends on how often the person visits the center each week and for how long. There are varying levels of intensity, ranging from "partial hospitalization" which is all day every day of the week, to "intensive outpatient" - which is usually a minimum of 3x/week, 3 hours/day, to once or twice a week, and people shift between these levels of intensity over the course of their treatment, depending on their needs.

The Right Strategy to Combat Addiction in Your Organization

The good news is, there are effective strategies to deal with addiction however, it is important to identify where patients fall across the continuum of care. A cookie-cutter approach won't work when treating people who have a substance use disorder. The American Society of Addiction Medicine (ASAM) recommends a multi-dimensional assessment process that evaluates a patient's needs, obstacles and liabilities, as well as their strengths, assets, resources and support structure. This information is then used to determine the appropriate level of care across a continuum.

Leading global health organizations recommend a combination of high-intensity behavioral support to help tackle the psychological habits people form with addictions, combined with medication to manage cravings.

Medication-Assisted Treatment (MAT)

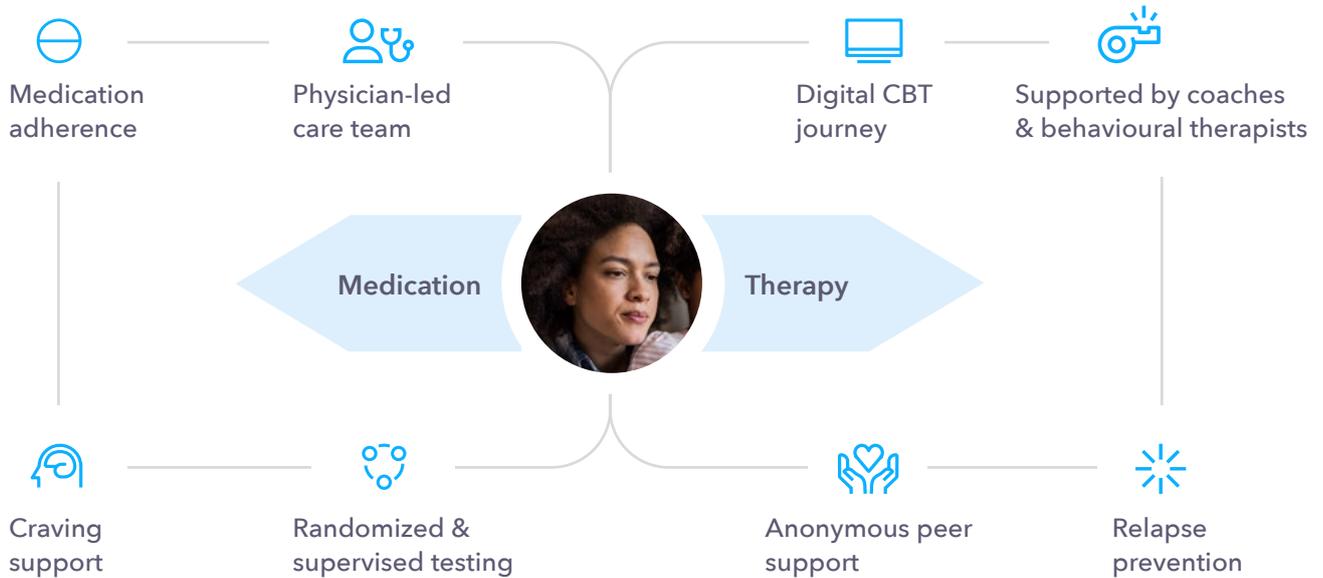
MAT encompasses the use of medication in conjunction with counseling and behavioral therapies to provide a holistic approach to treating substance use disorders. It utilizes FDA-approved medications and its programs are clinically driven and tailored to meet each patient's unique needs.

MAT is primarily used for the treatment of opioid addiction (heroin and prescription pain killers that contain opiates) but can also be employed for other substance use disorders such as alcohol and nicotine. During MAT treatment, medications are prescribed to normalize brain chemistry, block the euphoric effects of alcohol and opiates, relieve psychological cravings and normalize body functions without the negative effects of the misused substances. MAT can help patients sustain their recovery and prevent or reduce opioid overdose.

Proven to be clinically effective and to reduce the need for in-patient detox services, MAT provides a more comprehensive, individually tailored, holistic program of medication and behavioral therapy that addresses the needs of most patients. Its ultimate goal is full recovery, including the ability to self-direct one's life.

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Medication-Assisted Treatment (MAT)



MAT has been proven to:

- Improve patient survival
- Increase retention in treatment
- Decrease illicit opiate use and other criminal activity among people with substance use disorders
- Increase a patient's ability to gain and maintain employment
- Improve birth outcomes among women who have substance use disorders and are pregnant.

While MAT has been shown to be the best way to treat the whole person, it is often difficult to assess, and costly. To overcome these obstacles, cutting-edge solutions are available that are delivered digitally and provide multi-addiction care. These solutions:

- Help in preventing risky behaviors
- Facilitate outpatient services
- Support post-rehabilitation efforts

1 in 10

Americans with a substance abuse disorder receive treatment.

The Importance of Participation: Destigmatizing Addiction and Providing Effective Treatment Solutions for Employees

Addiction is destructive to people's lives in a way that other diseases aren't. In addition to the health consequences of drug addiction - which can include one or more associated health issues resulting from the damaging effects of long-term drug use (e.g. lung or heart disease, cancer, mental illness) - there is a stigma associated with substance use disorders that can:

- Reduce the willingness of policymakers and employers to allocate resources for treatment
- Reduce the willingness of providers in non-specialty settings to screen for and address substance addiction and,
- May limit the willingness of individuals with substance use disorders to seek treatment.

Science has proven that substance use disorder is a chronic brain disease that can be managed with medical treatment. It is NOT a moral failing or character flaw. Yet, only one in 10 Americans with a substance use disorder receive treatment.

The fact that addiction is highly stigmatized is fueling an American public health crisis that takes hundreds of lives every day. We can begin to reverse the stigma behind persons with SUDs

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through conscious and purposeful action, and by providing cost-effective and useful tools in the workplace that will help employees with SUD successfully recover from addiction.

The Importance of Technology

Computer programs and applications for cell phones and other mobile devices have become increasingly popular tools for both the prevention and treatment of substance use disorders. These technologies can be used as adjuncts to traditional treatment or, in some cases, a stand-alone therapy.



Employing technology can improve substance abuse and prevention treatment in a way that is cost-effective and increases reach to a broader population, including the many people with substance use disorders who aren't in treatment. Research has demonstrated that technology-based tools for the treatment of substance use disorders can be as effective as science-based programs delivered by highly-trained clinicians.

In Conclusion

Substance use disorder is one of the most significant drivers of medical spending among employers, yet only a small percentage of those with SUD access treatment. This is the result of a disease that is highly stigmatized, treatment options that are expensive and do not provide visibility into care methods and delivery of care, and are ineffective.

Technology-based solutions that are cost-effective and deliver evidence-based treatment programs to help people successfully recover from their disease have shown positive outcomes and help employers relieve the cost burden of SUDs on their business, increase productivity in the workplace and reverse low morale, all while improving the lives of their employees.

Quit Genius, the world's first digital clinic for multiple addictions.

Quit Genius is revolutionizing the delivery of addiction treatment. Today, having helped 60,000 people quit their addictions, the company is on a mission to help 100 million more. Quit Genius delivers digital addiction solutions to employers, health plans and members.

The Quit Genius digital addiction benefit solution includes:



Addiction Care Navigator to analyze and assess each employee, ensuring they get access to a tailored treatment program.



Physician-led care team to prescribe appropriate medications and monitor adherence



Digital Medication-Assisted Treatment program for smoking, alcohol and opioid addictions



Personalized digital Cognitive Behavioral Therapy journey for employees, delivered via Quit Genius mobile app



On-demand digital behavioral health coaching



Connected device to help validate program adherence



Relapse prevention tools



Anonymous peer support



Value-based payment model

Visit [quitgenius.com](https://www.quitgenius.com) today to speak with an addiction solutions expert.