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# Employer Investments in Digital, Whole-Person Health for Substance Use Disorders

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MAY 2024

## About the Milken Institute

The Milken Institute is a nonprofit, nonpartisan think tank focused on accelerating measurable progress on the path to a meaningful life. With a focus on financial, physical, mental, and environmental health, we bring together the best ideas and innovative resourcing to develop blueprints for tackling some of our most critical global issues through the lens of what's pressing now and what's coming next.

## About MI Health

MI Health bridges innovation gaps across the health and health-care continuum to advance whole-person health through the life span by aligning on healthy aging, public health, medical research, and food systems.

## About Public Health at the Milken Institute

The Public Health team develops research, programs, and initiatives to activate sustainable solutions leading to better health for individuals and communities worldwide. To catalyze policy, system, and environmental change in public health and sustain impact, we approach our work in three interconnected areas: Prevention and Chronic Disease, Mental Health, and Health Equity.



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“To quell the unprecedented loss of life, disruption of employment, and stigma from the overdose crisis and the rising rate of substance use, we must continue as a country (and as a workforce) to prioritize both increasing access to treatment through upstream interventions and providing the care and support people need to stay in treatment after they have started.”

—Nora Volkow, Director, National Institute on Drug Abuse,  
in our whole-person health discussions

## INTRODUCTION

The United States is facing a growing crisis, with rates of substance use disorder (SUD) exponentially increasing since the COVID-19 pandemic and impacting lives, families, and communities. The National Institute on Drug Abuse (NIDA) defines SUD as a “treatable mental disorder that affects a person’s brain and behavior, leading to their inability to control their use of substances like legal or illegal drugs, alcohol, or medications. Symptoms can be moderate to severe, with addiction being the most severe form of SUD.”<sup>1</sup>

According to the National Survey on Drug Use and Health, 8.9 million people aged 12 and older misused opioids in 2022.<sup>2</sup> The same survey reveals that 17.3 percent of the population met the clinical criteria for having a substance use disorder in the past year, including 29.5 million people with alcohol use disorder and 27.2 million people with a drug use disorder.<sup>3</sup>

The impact of SUD on the US economy has been profound. According to researchers at the Federal Reserve Bank of Philadelphia, the “annual (nominal) economic cost of the opioid epidemic, including the cost of lives lost, is estimated at \$700 billion (roughly 3.4 percent of GDP) in 2018 alone.”<sup>4</sup> The economic cost has inevitably increased during the COVID-19 pandemic as the rate of SUD has continued to climb, with more than 106,000 deaths reported between May 2022 and May 2023.<sup>5</sup>

Treatment for SUD has historically been more challenging to obtain than other conditions. Telehealth and digital health technologies, however, are one method to increase treatment options at any stage of a mental health condition and to reduce barriers that create further disparity and inequity in treatment. Telehealth encounters skyrocketed during the first three months of the COVID-19 pandemic, increasing by 766 percent.<sup>6</sup> With the increased use of telehealth, digital health technologies are primed to make a lasting impact in SUD treatment and care. According to a recent national survey from AmWell, two-thirds of respondents said they would use a digital mental health benefit if offered.<sup>7</sup>

**Figure 1: Components of Whole-Person Health**



Source: Milken Institute (2023), adapted from the University of Michigan Model of Wellness: <https://hr.umich.edu/benefits-wellness/health-well-being/well-being-u-m>

Digital health technologies can provide supplemental care for SUD that bridges personalized virtual services with traditional in-person treatment. In conjunction with virtual cognitive behavioral therapy and telehealth services, digital offerings can provide additional wraparound services that enhance treatment, such as peer support, sleep tracking, and journaling. Through innovative technologies and research, there are more evidence-based digital health technologies that can not only support but also treat those experiencing an SUD.

Since 2017, Milken Institute Public Health has led a range of initiatives to address SUD as a public health priority. This report continues to expand our [ongoing work](#) with leading SUD treatment experts. Here, we identify priority areas based on insights from key experts across the SUD treatment ecosystem. We recommend tangible actions for employers interested in building a whole-person approach to SUD in the workplace (or forming a recovery-ready workplace) while examining the role of evidence-based digital health technology as an effective contributing resource.



# PUBLIC HEALTH ANALYSIS AND RESEARCH



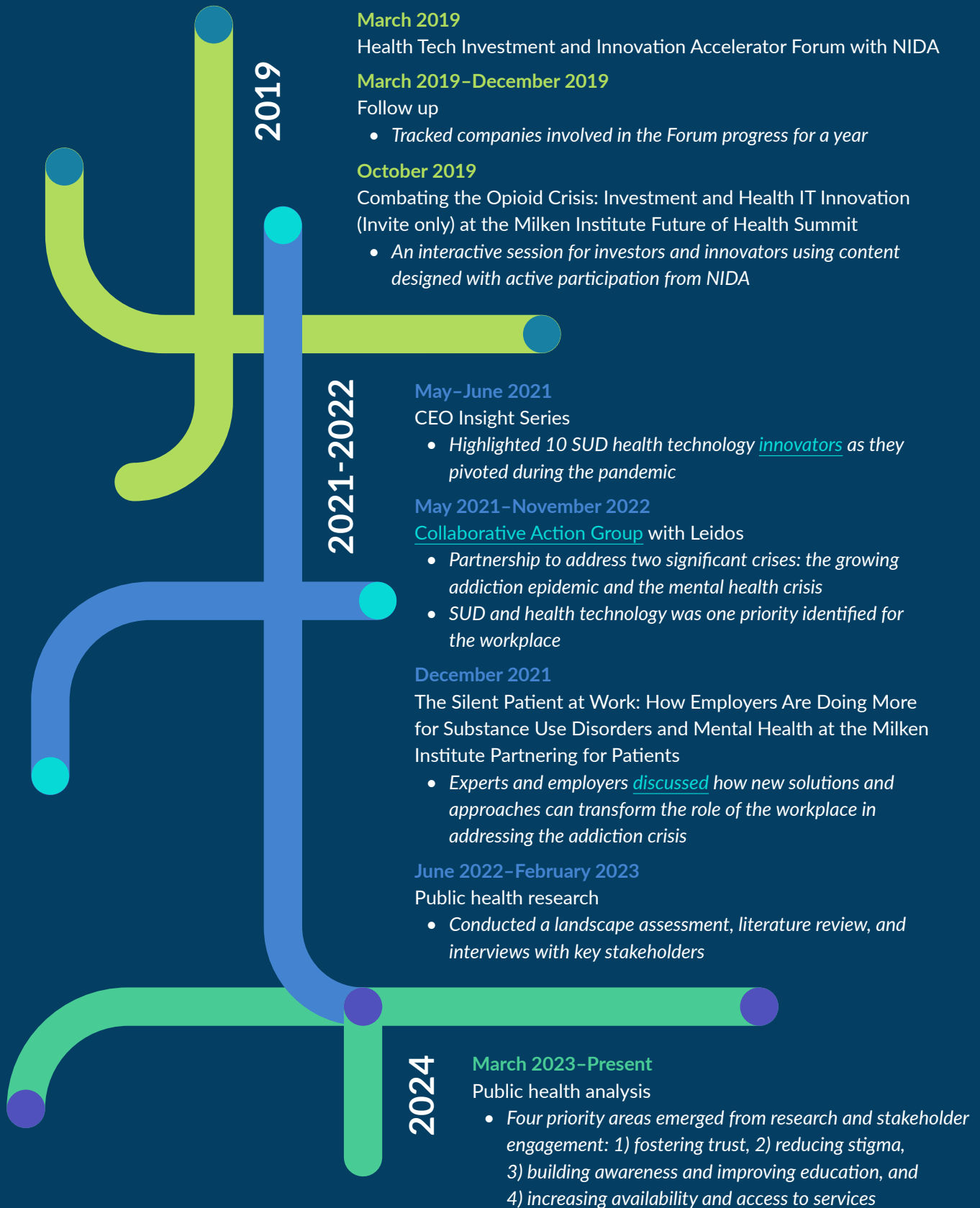
The Milken Institute Public Health team supports actions among employers at varying stages as they bring forward whole-person health approaches within their workplaces. This report builds upon the work at the cross-section of public health innovation and investment.

In March 2019, Milken Institute Public Health collaborated with the National Institute on Drug Abuse to host the Investment and Innovation Accelerator Forum. The event, designed to increase stakeholder awareness, featured small business interventions targeting communities combating the opioid crisis. Drawing upon [NIDA's Small Business Innovation Research program](#), each company presented its innovative technologies and scalable community solutions to a diverse audience of investor stakeholders at the event. The Milken Institute Public Health team tracked the companies' progress for a year, collecting insight and feedback from all investor attendees. In 2020, The [CEO Insight Series](#) highlighted 10 SUD health technology innovators as they pivoted during the pandemic and laid the foundation for this next phase of work in addressing the addiction crisis.

Released in early 2023, the [CEO Collaborative Action Group](#) focused on mental health and SUD and shared health technology as a priority and interest for the workplace. The CEO Collaborative Action Group highlights include aligning and convening on actionable steps regarding education, health equity, stigma reduction, and overarching strategy surrounding SUD investment, innovation, and treatment in the workplace.

**Figure 2: Journey of the Project**

Where one mission ended the other began. What started as an exploration of “hand offs” and shared mission with different roles turned into a journey.



# TERRAIN OF SUBSTANCE USE DISORDER

The current SUD ecosystem is overwhelmingly complex and consists of many silos. Siloed sectors encompass medical care (including SUD treatment), the criminal legal system, illegal supply and supply control, harm reduction, first responders, child welfare, income support and homeless services, employment, education, and other support for families and people experiencing SUD.<sup>8</sup> Within the SUD ecosystem, the terrain of treatment is particularly fraught with challenges because of a lack of treatment services, workforce and provider shortages, payment and coverage uncertainty, societal stigma, and lack of recovery support services and evidence-based treatment practices.

**Figure 3: Terrain of the Patient and Caregiver Journey and Impact on Workplace**

The current experience for individuals impacted by SUD is intricate. Infrastructure, stigma, and access all impact the journey of an individual experiencing SUD.



Source: Milken Institute (2024)





# ROLE OF THE EMPLOYER AND THE ECONOMIC IMPACT OF INVESTMENTS



Employers seek to support their employees while normalizing a whole-person approach to SUD. The response to this crisis requires a whole-of-society approach, including employers of all sizes, which are uniquely positioned to reach employees, their families, and their surrounding communities because employer-sponsored health insurance (ESI) currently provides coverage for approximately 180 million people or roughly half of the US population.<sup>9</sup> Rahul Gupta, director of the Office of National Drug Control Policy, notes, “Sixty percent of people in recovery are employed.”<sup>10</sup> Employers can help their employees access treatment and recovery resources that are evidence-based, innovative, inclusive, and preventive in nature to address addiction.

Employers are ideally positioned to help employees with an SUD, given that the average person spends 90,000 hours at work in their lifetime.<sup>11</sup> Addressing this crisis is both a moral and ethical imperative and an economic and business imperative. SUD is estimated to cost employers \$81 billion annually.<sup>12</sup> Greater than 70 percent of people with a substance use disorder maintain employment in some form.<sup>13</sup> National Opinion Research Center at the University of Chicago estimated that supporting an individual through recovery could save a company approximately \$8,500 per individual per year.<sup>14</sup>

Substance use impacts workplaces across sectors and industries, including loss of productivity, increased workplace accidents and injuries, increased absenteeism, high turnover, and low employee morale, among other issues.<sup>15</sup> Research suggests that supporting a person in SUD recovery may be associated with positive outcomes in the workplace. For example, a person in recovery can experience improved work attendance, stable employment, positive job performance evaluations, fewer disciplinary actions, and lower health-care costs.<sup>16</sup>

Employers can help remove these barriers by offering digital health tools that support the treatment of SUD through their employee benefits programs and by becoming a recovery-ready workplace, eliminating stigma and fear by ensuring privacy and anonymity for employees receiving services.



# LANDSCAPE OF DIGITAL HEALTH

Digital health technologies are transforming the health-care landscape, including mental health and SUD. Digital health investments peaked in 2021 with a dramatic ascent credited to the increased need and acceptance of telehealth and virtual services during the COVID-19 pandemic. Yet, in contrast, 2023 was the lowest funding year in digital health since 2019 (with total venture funding at \$6.1 billion compared to 2021's peak of \$29.1 billion).<sup>17</sup>

As currently classified, digital health includes mobile health (mHealth), software, health information technology (IT), wearable devices and sensors, telehealth, and telemedicine, in addition to smartphone applications. Hundreds of digital health technologies are available to employees across the care continuum. However, availability depends on the size and scale of an employee benefit plan because, in some cases, employees can access only a small fraction of the digital health technologies available in the wider market. More remain in development, including “at least 17 wearable medical devices in product pipelines with the sole purpose of treating and monitoring substance use disorders” as of late 2023.<sup>18</sup>

Despite the burgeoning development of digital health technologies, limited evidence-based technologies are available. However, a newly established coalition of 14 organizations supported by the Peterson Health Technology Institute is tracking the development of evidence-based digital health technologies and evaluating their clinical and cost-effectiveness for payers and employers.<sup>19</sup>

In addition, even fewer tools have received authorization as digital therapeutics or US Food and Drug Administration (FDA) breakthrough status. Tool developers can request an expedited review from the FDA to receive this status through the Breakthrough Devices Program.<sup>20</sup> Most digital health offerings lack supporting evidence that the technology improves health outcomes but instead may promote the overall well-being of a device's users. This dearth of supporting evidence, coupled with a wide array of tools, has created a complex market for employers, providers, and people to navigate. The FDA announced in late 2023 the creation of a digital health committee (operational in 2024) charged with assisting the FDA in providing relevant<sup>21</sup> perspectives to improve the agency's understanding of associated benefits, risks, and clinical outcomes for digital health technologies.<sup>22</sup>

Regardless of the cooling market, limited evidence base, and privacy challenges, the promise of digital health continues to shape mental health and addiction care. In addition to in-person care, digital health technologies can be combined with each other to address individual health needs as part of a well-curated, personalized care plan. Digital health enables 24/7 access to resources, treatment, and peer support with in-person care and treatment. This flexibility is inarguably the greatest strength featured across the digital health landscape. It can increase the access and availability of services that help alleviate the current workforce shortage as seen within existing mental health-related policy, notwithstanding the challenges illustrated in the terrain of the patient and caregiver journey below.

#### Figure 4: Whole-Person Approach and the Role of Technology to Address Social Drivers of Health

A whole-person approach requires addressing the social and systemic drivers of health. The whole person includes different intersecting identities, diverse multigenerational perspectives, and lived experiences.



Source: Milken Institute (2024)



# CURRENT POLICY AND CHALLENGES




As employers seek digital health technologies as one type of employee benefit, they must consider how to formulate organizational SUD policies in the aftermath of the COVID-19 pandemic.

The Public Health Emergency (PHE) created several flexibilities within the digital health environment, including allowing audio- or video-only patient visits, monitoring patients remotely, eliminating supervision of advanced practice registered nurses, and relaxing face-to-face requirements in most states. With the end of the PHE, many flexibilities for telehealth and SUD treatment have remained in place, with either an expected end date of December 31, 2024, or permanent adoption by the government at the federal and state levels. The flexibilities that enabled health-care providers to see people across state lines and practice outside of their state of licensure were not extended as of this writing.

Perhaps the most notable changes related to SUD treatment for digital health-related SUD efforts were those to the Ryan Haight Online Pharmacy Consumer Protection Act of 2008, which stated that “a prescribing practitioner—subject to certain exceptions—may prescribe controlled medications to a patient only after conducting an in-person evaluation of that patient.”<sup>23</sup> Under the PHE, providers could prescribe through telehealth without in-person evaluation, which is set to expire on December 31, 2024. The Telemental Health Care Access Act, introduced in early 2024 in the US Senate, would eliminate the in-person evaluation requirement and revert to the policies set under the PHE.

Telehealth has been widely instrumental in extending access to care for millions of Americans with documented positive outcomes, whether related to SUD care, cancer, or many other conditions.<sup>24</sup> The Agency for Healthcare Research and Quality states, “Research has demonstrated that it [telehealth] promotes continuity of care, decreases costs, and improves patient self-management and overall outcomes, particularly in the management of discrete disease states.”<sup>25</sup>



As with other pandemic-era relief aid, individuals and firms exploited specific flexibilities (including the audio- or video-only components) to prescribe controlled substances in higher amounts than average, combined with improper (or nonexistent) recordkeeping. At a time when substance misuse continued to rise, these providers and firms improperly took advantage to boost revenue at the expense of patient care.

The Department of Justice, Drug Enforcement Administration, and Federal Trade Commission have launched investigations of providers, demonstrating the impact of regulatory oversight on prescribing and dispensing opioids. Several companies were notably charged with violating the Controlled Substances Act after scheduling appointments at a frequency that made accurate medical diagnosis impossible, which raised red flags, and allegedly violated multiple state laws.<sup>26</sup>

What are the lessons learned? Continued flexibility of telehealth services with appropriate safeguards is critically needed to increase access to care across the economic and geographic landscape.



# EMPLOYER PRIORITIES AND ACTIONS TO CONSIDER

The Milken Institute Public Health team conducted an informal review of peer-reviewed and grey literature published between 2018 and 2023 and examined the use of digital health technologies in the evidence-based treatment of SUD. In addition, we completed a landscape assessment of available digital health technologies to treat and manage SUD. We engaged 13 thought leaders in semi-structured interviews, representing providers, payers, employers, and digital health developers, to better understand the barriers to entry or success and ways to embed evidence-based research and outcomes into digital health technologies to address SUD offered by employers.

Our research and stakeholder engagement revealed four priority areas in which employers are poised to deploy a whole-person health approach to SUD policies that encompasses (1) fostering trust, (2) reducing stigma, (3) building awareness and improving education, and (4) increasing availability and access to services. Recognizing that employers are in different stages of development and change, this report section identifies priority areas, insights, and actions to consider at varying stages (i.e., early, mid, and advanced) in conjunction with digital health technologies.

- **Early stage:** Employers are interested in beginning the foundational SUD work to support their employees holistically.
- **Mid-stage:** Employers started the work to support employees and would like to expand their whole-person health approach to include SUD.
- **Advanced stage:** Employers have expanded their whole-person health approach to include SUD and would like to move toward adopting and implementing digital health solutions in the workplace.

## Priority Area: Fostering Trust

One health policy leader emphasized, *“The only way to meaningfully change behavior and improve outcomes is through building trust.”*

### Key Insights

1. Fostering employee trust to promote a supportive organizational culture is a critical priority for adopting and implementing digital health and whole-person solutions in the workplace.
2. Building and maintaining trust while cultivating a culture of empathy will help employees experiencing an SUD feel more comfortable seeking support.
3. Building trust should be a foundational focus for employers as they advance their whole-person approach utilizing digital solutions to address SUD.

## Actions to Consider

**Early: Ensure a safe and equitable space and opportunity for employees to ask questions, provide input on their lived experiences, and share their concerns about SUD, benefit offerings, and digital health technology resources.** In this space, employees should feel psychologically safe and comfortable asking for help or challenging the status quo without fear of consequences.<sup>27</sup>

**Mid: Develop an employee-led communications plan.**

- Shift the paradigm away from typical marketing tactics such as email in favor of personalized, employee-led programs to develop communications about newly available digital health resources for employees, including employee anecdotes about their experiences benefiting from, engaging with, or using the tools.
- Implement a train-the-trainer model in which employees who have used the tool can safely and anonymously share a how-to guide or train their peers to use the available resources. This effort could include pre-recorded demos produced by tool users that can be easily accessible in a private environment such as a home laptop, computer, or smartphone.

**Advanced: Purchase new and promote existing evidence-based solutions that are employee-focused and prioritize the needs of the employees.** This effort requires co-development with employers, employees (or people who may use the tool), developers to customize the digital health tool or resource, and individuals with lived experience who can inform implementation. Employees across generations and life experiences have a variety of conditions, and therefore, customization is necessary to address their needs.

## Employer Spotlight: Co-Creation of SUD Tools

The First Quadrant Advisory (FQA) Institute for Social Impact has developed a Recovery Friendly Workplace (RFW) initiative that provides implementation services for employers seeking to foster a welcoming and inclusive work environment for employees impacted by SUD. Originally established in New Hampshire in 2018, RFWs are located in 30+ states; in addition, the National Recovery Friendly Workplace Institute was launched in 2024.

The FQA Institute for Social Impact has established an Innovation Accelerator Program and an Addiction Innovation Challenge in partnership with MATTER. The program demonstrates the ability to establish trust within a community by co-creating SUD tools. The program will identify promising start-ups and bring to market SUD solutions that will have measurable, meaningful impact. In addition, FQA published a comprehensive resource in March 2023, *An Introduction to Substance Use Disorder: Prevalence, Trends, Treatment, Challenges, and Solutions*.<sup>28</sup>



## Priority Area: Reducing Stigma

A clinical psychologist and digital health professor stated, *“We can use technology as a safe space for employees to access care.”*

### Key Insights

1. According to NIDA, stigma may stem from antiquated and inaccurate beliefs that addiction is a moral failing instead of what is known to be true, that is, that addiction is a brain disorder.<sup>29</sup> Reducing stigma is a foundational focus for adopting digital health tools while centering the whole person.<sup>30</sup>
2. Stigma is experienced differently across industries and generations, so it is essential to have customizable options for employees.
3. Nearly all the stakeholders interviewed agreed that digital opportunities have the potential to remove or reduce stigma. However, creating a culture of openness to support inclusion is essential.

## Actions to Consider

**Early: Review existing language in policies, call centers, automated messages, printed and online benefits, and health plan information to ensure that no [stigmatizing language](#) is used according to NIDA's *Terms to Avoid, Terms to Use, and Why*.** When employees with SUD feel stigmatized, they are less willing to seek help or treatment.<sup>31</sup> Removing stigmatizing language from materials across the organization and incorporating entry points to access information (e.g., employee assistance programs) are excellent initial steps in creating a safe, stigma-free environment.

**Mid: Assess how work practices and policies may contribute to the addiction crisis.** Employment factors such as pay inequity, poor job conditions, and exposure to adverse experiences could lead to additional stress and may even lead to burnout. In some instances, stress and untreated burnout can contribute to developing an addiction and add to the challenges of recovery.<sup>32</sup>

**Advanced: Ensure that digital tools can be utilized anonymously and implement a privacy wall to support employees who fear retaliation or targeting.** Guarantee to employees that no identifiable or personal information derived from the tool will be shared with their employer under any circumstance and that an employer is unaware whether (or when) an employee downloads or uses the tool.

## Digital Health Spotlight: Digital Opportunities Reducing Stigma and Personalizing Care

Evernorth Health Services, an affiliate of Cigna, recognized that many people living with behavioral or mental health-care conditions are unable to find providers. Limited access and the overwhelming number of services (i.e., point solutions that are narrow in scope and address a single health condition or solution) within the health-care system challenge efforts to seek care.

To streamline the process of seeking care and to reduce the stigma, Evernorth created a hybrid platform that utilizes a combination of high-touch, national network of facilities, professionals, and virtual and digital providers who can customize care for each member. Care is supported by integrated medical, behavioral, and pharmacy data and uses behavioral models and predictive analytics to identify which members might need behavioral care and proactively engage them sooner. These efforts ultimately eliminated the burden and stigma associated with finding care and personalizing care plans that meet people where they are through the use of digital tools or a combination of in-person and virtual services.<sup>33</sup>

## Priority Area: Building Awareness and Improving Education

A product innovation executive highlighted the need for building awareness of and improving education among key decision-makers of employers on what realistic, evidence-based solutions are available. The executive noted, *“There is a big push for inpatient rehabilitation, in a residential model, in a warm-weather state that has equestrian therapy, for an extended period of time. This is promoted by media.”*

### Key Insights

1. Building leadership awareness of the SUD crisis and evidence-based solutions can improve the sustainability of digital health programs or resources offered in the workplace.
2. Employers may unintentionally pay for harmful treatment because they are not informed or receive biased or outdated information during the benefits decision-making process.
3. Employers may need education on what evidence-based treatment and recovery options are available to their employees and what policy updates are available to them as employers.

## Actions to Consider

**Early: Advocate for education opportunities for executives and benefit decision-makers to learn what addiction is and what treatment options are available.** After employers foster trust and reduce stigma in the workplace, employees can advocate for these opportunities as a first step in improving education on addiction and treatment.

**Mid: Become a Recovery-Ready Workplace to reduce societal stigma and misunderstanding by fostering a culture in which SUD is recognized as a treatable health condition.**<sup>34</sup> This program offers guidance, education, and tools for implementing recovery-ready workplace policies in different settings. According to the Department of Labor, the benefits of being a recovery-ready workplace are an expanded labor force, increased worker well-being, decreased turnover, improved productivity, and reduced health-care costs.<sup>35</sup>

**Advanced: Request digital health companies with SUD treatment solutions to provide supporting data and evaluation metrics to learn and understand whether the tool is evidence-based.** The Substance Abuse and Mental Health Services Administration (SAMHSA) offers a resource to assist evidence-based decision-making for SUD. The Evidence-Based Practices Resource Center provides communities, clinicians, policymakers, employers, and others with the information and tools to incorporate evidence-based practices into their communities or clinical settings.<sup>36</sup>

## Priority Area: Increasing Availability and Access to Services

*“How can technology and digital health tools be used to improve outcomes and engagement and give people more personalized care?”* asked a behavioral health expert.

### Key Insights

1. Digital health has the potential to expand access to areas with limited available health professionals or to individuals who would otherwise not be able to access in-person services due to existing barriers.
2. Digital health increases the availability of care 24/7 and access to resources, treatment, and peer support, for which in-person care is limited to traditional office hours.
3. Multiple digital health tools that address critical components of an individual’s care can be combined in different ways to manage and support individual health needs as part of a well-curated, personalized care plan. These tools can also be used consecutively with in-person services, and results, data, or insights captured through each device can be shared with providers to enhance the individual’s treatment plan.
4. Improving access to essential treatment and recovery options can promote whole-person health for employees. Using digital health tools may improve access and uptake compared to brick-and-mortar facilities for mild-to-moderate SUD.

## Actions to Consider

### **Early: Support employees navigating their employee benefits and resources by communicating clearly what is provided to them and their families.**

- Employees are frequently unaware of nontraditional or additional benefits provided through their employer. Therefore, proactive communication is critical.
- Establish transparency at the beginning of the program by proactively communicating what digital health tools are available, how and when employees can access the tool, and what information is required to participate. Evidence-based tools are available that employers can purchase or customize for their employees using guidance from the Peterson Health Technology Institute's Digital Health Collaborative, which aims to provide independent, evidence-based assessments of digital health products.<sup>37</sup>

### **Mid: Promote workplace flexibility that allows employees consistent treatment options.**

- Where possible, continue to leverage the technology and flexibilities used during the COVID-19 pandemic that made the workplace more accommodating, such as hybrid and remote policies.
- Employees who choose to use digital health tools should also have the right “to be forgotten” or have options to continue to use the tools even after they move to another employer. Messaging either within the program or through the employer should communicate how employees can remove their information from the program or continue to participate even after they leave the workplace. This option could consist of an individual payment plan or a list of care credit-like support options if an employee wishes to continue the program outside their current employer to ensure continuity of care.

### **Advanced: Leverage evidence-based technologies to address SUD by empowering employees and their families to overcome challenges in their environments.**

- Reference freely available resources that evaluate the effectiveness of evidence-based digital health tools that employers could offer their employees, including the Digital Health Collaborative<sup>38</sup> and SAMHSA's Mental Health Technology Transfer Center Network, to support the delivery of evidence-based practices.<sup>39</sup>
- Offer remote or hybrid work options to encourage employees to receive digital support or treatment from where they feel the safest. For those positions where remote or hybrid is not an option, such as construction or manufacturing, develop tailored education and prevention programs for these work environments. As an example, one-third of construction workers suffer from a musculoskeletal disorder with a corresponding opioid use rate of three times the national average.<sup>40</sup>



## Employer Spotlight: Promote Workplace Flexibilities

In the US Office of Personnel Management (OPM) Healthcare and Insurance Federal Employees Health Benefits (FEHB) program 2023 carrier letter, the OPM strongly encourages carriers to focus on the “provision of mental health benefits by continual monitoring of both provider access and availability” by “leverage[ing] ongoing telehealth expansion to address provider shortages while educating members regarding the availability of these services.”<sup>41</sup>

OPM has continued to address mental health efforts through the recent adoption of Mindful Fed as well as calling for an expansion of employee assistance programs into a more comprehensive Employee Wellness Program that would include augmented wellness digital applications.<sup>42</sup>

“Increased use of digital health technologies (including when offered as a health insurance benefit by employers) can enable individuals to become aware of a potential mental health condition as well as aid in tailoring their treatment approach.”

—Nora Volkow, Director, National Institute on Drug Abuse,  
in our whole-person health discussions

## CONCLUSION

Employers have the opportunity to build and promote a whole-person health approach for the workplace that includes investing in health technologies that consider the end-to-end experience of employees in recovery from the chronic disease of SUD and evaluating whether the work environment supports employees.

As part of this report, Milken Institute Public Health conducted a landscape assessment, a literature review, and interviews with key stakeholders, which revealed the need for employers to prioritize fostering trust, reducing stigma, building awareness, improving education, and increasing availability and access to services as they develop their broader employee health strategy. The actions in this report aim to embed substance use disorder resources and customized digital health tools in the workplace. We support efforts among employers to address SUD in the workplace and are eager to leverage our cross-sector network and the actions identified in this report to advance whole-person health.

The Institute will continue to address the economic and social impacts of the digital health landscape related to SUD through our collective insights and research. We will analyze and discuss how whole-person health and digital-based technologies further evolve as a defining element of preventive health care and create structural change within the health-care ecosystem.

Digital health is altering the calculus for employers, insurers, and providers and redefining what truly equitable and accessible health care means. People can now be increasingly active participants in management of their day-to-day treatment. As a result, we need to understand the accompanying impacts on employer adoption, insurer reimbursement, and government and private-sector funding.

This report not only discusses the terrain related to evidence-based treatments for SUD in the immediate aftermath of the COVID-19 pandemic but also sets the stage for continued discussion as digital-based technologies further advance research and treatment and acts as a catalyst to design and achieve better employee health outcomes for SUD, mental health, and a myriad of other health challenges.



# GLOSSARY

**Addiction** is defined as a chronic, relapsing disorder characterized by compulsive drug seeking and use despite adverse consequences. It is considered a brain disorder because it involves functional changes to brain circuits involved in reward, stress, and self-control. Those changes may last a long time after a person has stopped taking drugs.<sup>43</sup>

The **Breakthrough Devices Program** is voluntary for certain medical devices and device-led combination products that provide more effective treatment or diagnosis of life-threatening or irreversibly debilitating diseases or conditions. Breakthrough devices must meet the FDA's rigorous standards for device safety and effectiveness to be authorized for marketing.<sup>44</sup>

**Digital mental health** is the application of digital technologies in mental health care that can be used for many purposes, including mental health and well-being promotion and prevention, well-being maintenance/self-care, early intervention, or treatment of specific mental disorders, such as SUD.<sup>45</sup>

**Recovery** is a process of change through which people improve their health and wellness, live self-directed lives, and strive to reach their full potential. Even people with severe and chronic substance use disorders can, with help, overcome their illness and regain health and social function. This is called remission.<sup>46</sup>

A **Recovery-Ready Workplace** adopts policies that are designed to support employees with substance use disorder by creating a safe and healthy work environment, reducing stigma, breaking down barriers to employment, and promoting additional treatment and recovery support services.<sup>47</sup>

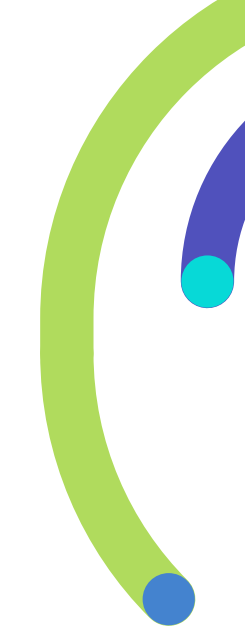
The broad **scope of digital health technologies** includes categories such as mobile health, health information technology, wearable devices, telehealth and telemedicine, and personalized medicine. Digital health technologies use computing platforms, connectivity, software, and sensors for health care and related uses. These technologies span a wide range of uses, from applications in general wellness to applications as medical devices. They include technologies intended for use as a medical product, in a medical product, as companion diagnostics, or as an adjunct to other medical products (devices, drugs, and biologics). They may also be used to develop or study medical products.<sup>48</sup>

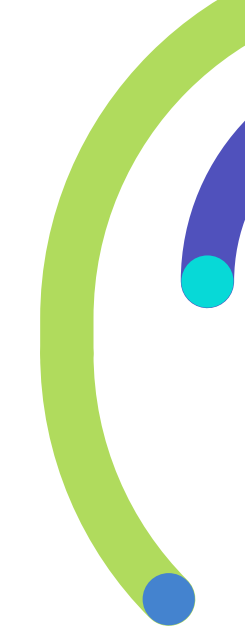
The **Small Business Innovation Research program** is one of NIDA's Small Business Programs, also known as America's Seed Fund. The goals of the program are to stimulate technological innovation, meet federal research and development needs, increase private-sector commercialization of innovations developed through federal R&D funding, and foster and encourage participation in innovation and entrepreneurship by socially and economically disadvantaged persons and women-owned small businesses.<sup>49</sup>

**Substance use disorder (SUD)** is a treatable mental disorder that affects a person's brain and behavior, leading to their inability to control their use of substances such as legal or illegal drugs, alcohol, or medications. Symptoms can be moderate to severe, with addiction being the most severe form of SUD.<sup>50</sup>

# ENDNOTES

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# ACKNOWLEDGMENTS

The authors appreciate the time and valuable input from the many experts from the private sector, nonprofits, and government with whom we consulted to develop this report. We are incredibly grateful to these organizations for their engagement and willingness to share.

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