Special Report: A Road Map for Advancing a Recovery-Ready Nation

Includes Reporting from the 2022 Recovery Research Summit

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ForsMarsh | GLOBAL RECOVERY INITIATIVES FOUNDATION

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Introduction

Last year, the United States reported more than 52,000 alcohol-induced deaths and nearly 108,000 deaths due to a drug overdose—three-quarters of which were from opioids.[1,2] One of those deaths was Daniel Boccia. Daniel was 30 years old when he died after a drug relapse at an inpatient treatment facility within 48 hours of his arrival. His parents had paid $27,000 for 6 weeks of treatment there. Daniel had spent half of his life fighting an opioid use disorder (OUD) and nearly a quarter of his life in a Georgia prison for armed robbery driven by his disorder. Appalled by the extraordinary burdens imposed on families trying to maintain some level of contact with incarcerated loved ones who had substance use disorders (SUD), Daniel's mother founded a nonprofit organization and became a champion for both reforms in the criminal justice system and for getting more help for people with alcohol and other drug use disorders.[3,4] But parental engagement and advocacy could not give Daniel—and millions of other young people and adults in this country—the level of essential support needed to sustain recovery from substance use and to achieve remission.

For decades, the United States and its citizens have invested heavily in efforts to reduce the consequences of alcohol and other drug use disorders in this country, with most of the investment focusing on prevention and treatment. In line with its mission to build capacity for science-based SUD recovery support services, the Global Recovery Initiatives Foundation (GRI), with funding, planning, and logistics provided by Fors Marsh, hosted the second Recovery Research Summit: Advancing a Recovery-Ready Nation on September 14–15, 2022.[5] The Summit focused on successful SUD management through recovery support and was organized around three overarching themes: 1) expanding the science of recovery, 2) making recovery possible for more Americans, and 3) eliminating barriers and increasing opportunities for recovery. Fors Marsh's SERV division funds projects aimed at tackling systemic issues where gaps exist or funding is limited. Addressing the unmet needs of people in recovery from SUD is SERV's primary focus. The Summit was designed to encourage actions that will continue to increase awareness and priorities for recovery research, policy, and essential services.

The first Recovery Research Summit, hosted in 2020, focused on identifying challenges to recovery and opportunities to inform SUD research priorities among federal agencies, foundations, and private sector organizations. The Summit led to a greater consensus in defining the recovery process and the many pathways to recovery, stimulated significant growth in recovery research, and resulted in new grantees from both the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA).

During the 2022 Summit, agency leaders shared presentations on current research findings and future research possibilities. Grantees and other stakeholders discussed real-world successes and challenges and outlined urgent needs from the field. Foundations, businesses, and labor expanded the discussion with their perspectives on recovery. Fors Marsh presented findings from a comprehensive survey on workplace attitudes, priorities, and needs related to recovery, entitled the 2022 Workplace Recovery Survey—the first in a five-year period of company-funded research they plan to conduct on workplace contributions to a recovery-ready nation. The 2022 Summit

also furthered discussions from the 2020 Summit on measurable components of the stages of recovery and the establishment of recovery research as a research domain.

The State of Recovery Research and Support

With over 21 million American adults reporting that they experience SUD[6] and an estimated annual economic impact of substance misuse of $440 billion in 2019, developing safe and effective SUD prevention, treatment, recovery, and harm reduction options must be a public health priority. Under the guidance of the White House's Office of National Drug Control Policy (ONDCP), 19 agencies across the federal government are engaged in research, community support programs, policy reviews and updates, and administrative actions to improve the health and lives of the American people by improving the nation's drug control priorities and activities. In April 2022, ONDCP issued the National Drug Control Strategy (NDCS, referred to throughout this report as "the Strategy"), calling out the destruction brought about by SUD and the opioid epidemic. The Strategy lays out seven priorities, each with a set of principles and actionable steps to support achievement of overarching goals that will reduce the national impact of SUD. One of the seven priorities is "Building a Recovery-Ready Nation."

The recovery process is long and, like most life paths, is typically rocky. It is also different for each person. The process can begin before substance use stops and very frequently includes a return to use for some period. Recovery from SUD can also include reduced levels of use if they contribute to better physical and mental health and more successful functioning. For many people, recovery from SUD does not include formal treatment. Although the recovery process can vary, a common feature for all people in recovery is the importance of recovery capital—internal and external resources that individuals with SUD can use to help them pursue, achieve, sustain, and enhance a life in recovery. Internal recovery capital includes attitude, optimism, knowledge and skills, perseverance, and for many people, faith. External recovery capital includes family and community support, both organized and informal support from peers in recovery, employment, housing, health care, transportation, and income. Research consistently demonstrates that building recovery capital lowers the risk of failure and increases the likelihood that those with SUD will achieve recovery. At the same time, stigma is the constant enemy of recovery. Stigma often causes people to lose self-esteem, confidence in their ability to seek treatment and remain in recovery, trust in their ability to obtain and maintain employment, and belief in the systems intended to assist them. Stigma also causes institutional discrimination in the criminal legal system, juvenile justice system, education, employment, housing opportunities, health and health care, insurance coverage, and human services.

Even before release of the Strategy, there was a deliberate increase in federal attention to the recovery phase of SUD. For example, policy and funding changes that build on the Recovery Community Services Program fielded by the Substance Abuse and Mental Health Services Administration (SAMHSA) in the U.S. Department of Health and Human Services (HHS) are enabling innovations in formal engagement of non-clinical recovery support providers such as peers and family members; many of these innovations are being tested around the country. Starting the recovery process earlier by providing recovery counseling in emergency medical settings is an increasingly used method, especially in hospitals with significant experience in treating drug overdoses. Recovery community organizations (RCO) and recovery community centers (RCC), collegiate recovery programs, and recovery high schools are serving both general and discrete populations of people in recovery and are achieving measurable levels of success in their participants. Similar to collegiate and high school recovery programs, combined clinical- and

peer-recovery support through alternate peer groups use family-centered models to help youth in recovery.

These recovery support advancements materialized with the help of research and evaluation that identified necessary refinements and enhanced the development of best practices. The first principle in the Strategy's priority of building a recovery-ready nation is expanding the science of recovery through sustained growth in targeted, actionable research that is needed to guide policy and resource allocation decisions related to recovery. The Strategy calls for ONDCP to convene a recovery research workgroup of HHS offices and agencies to identify current research efforts and prioritize research areas that will support development of evidence-based policy and programs related to recovery. In addition, ONDCP will recommend research funding priorities and levels annually for the President's budget.

Advances in the science of recovery will require commitment and funding to sustain clinical and programmatic research in SUD recovery. According to Yuri Maricich, MD, MBA, a Recovery Research Summit participant and former head of development and chief medical officer at Pear Therapeutics, the trajectory of cancer research can serve as a useful guide. Today, about 5.5% of the U.S. population of 320 million—about 17.6 million people—has cancer. The country loses 600,000 people to cancer annually.

At the same time, about 10% of the U.S. adult population of 210 million—about 21 million adults—have SUD, and another 17 million reported having both SUD and a mental health condition; the country loses 160,000 or more people a year to drug poisoning and alcohol-related deaths. Both cancer and SUD are characterized by the complex interplay between genetic, epigenetic, and environmental factors; significantly, SUD has an added behavioral factor that impacts recovery.

Funding increases that started 50 years ago have dramatically expanded cancer research and enabled the development of measures and markers that led to foundational therapeutics and steadily improved cancer outcomes. Public and private insurance have long covered targeted therapies, moving cancer ever closer to becoming a chronic condition rather than a terminal one. The National Institutes of Health's (NIH) FY22 budget for the National Cancer Institute (NCI) was $6.9 billion. By contrast, SUD treatment options and recovery services today remain limited, with meaningful measurement very scarce. There are few evidence-based precision therapies that enable patients to get SUD treatment, and equally few evidence-based services to meet recovery needs. Despite a federal law to the contrary, public and private insurance still routinely denies coverage of SUD treatment and recovery services. The NIH's combined enacted budget for 2022 for NIDA, NIAAA, and the National Institute of Mental Health (NIMH) totaled about $4.4 billion, just under two-thirds of the budget for the NCI ($6.9 billion).

The 2022 Recovery Research Summit reviewed progress made on building the scope and field of recovery research, the sources of increased private investment in recovery support tools, some of the latest data on recovery in the workplace, and efforts to expand recovery support services, among other critical issues. Although the scope of knowledge covered during the Summit was broad, it was not all-inclusive, and many important issues were left unexplored due to time constraints.

Nonetheless, in the pages that follow, we will share insights from Summit presentations, including discussions of research findings, advances, and strategic considerations in the following recovery support channels:

- Clinical—including medication, physiological, and psychological advances in SUD management
- Functional—including employment, housing, education, health care, and transition services
- Community—including peer-to-peer groups, mutual- and self-help groups, and faith-based and secular recovery support
- Technological—including online and digital advances

Recovery is the main focus of SUD management after treatment or abstinence, but in too many cases, a crisis event during recovery can lead to a return to use. Nonetheless, recovery is the space where those with SUD spend the bulk of their lives. Whether their recovery is characterized by absolute abstinence, medication assistance, or controlled substance use, it is the place where they strive to manage their vulnerabilities daily and achieve a life of self-efficacy and purpose. Investment in their success through study, education, partnerships, stakeholder collaboration, and funding is crucial not only to achieving the strategic recovery goals outlined in the Strategy, but more importantly, for enabling the millions of men, women, and youth in recovery to participate fully as contributing members of society.

Chapter 1:

Considerations for Sustainable Recovery

Since the early days of humankind, we have sought ways to change our moods and our minds. Archeological evidence stretching as far back as the Neolithic period shows burnt seeds and plants, alcohol residue, and other psychoactive substances alongside human remains, often in tombs and ceremonial spaces. These substances have long been used not only in ceremonial contexts or as part of spiritual or medicinal practices, but also as social icebreakers or, in the case of certain stimulants such as coca leaves or caffeine, as an energy source or an aid to support productive labor. In more recent times, substance use and misuse—the use of alcohol, illegal drugs, and/or prescribed medications in ways that produce harms to both users and those around them[7] —have also been characterized as vices and detriments to society.[8] A range of factors, including perceived social harms and attitudes about the individuals using or misusing substances, have informed governmental responses to alcohol and other drug use. In the United States, Congress enacted the Harrison Act to regulate access to opioids and other drugs.[9] The Harrison Act was also leveraged to develop a comprehensive regulatory framework that has evolved over time.[10] Other governing bodies have tried to regulate or prohibit use of these substances, with the greatest success resulting when cultures, rituals, and traditions foster a consensus on both when and who can use such substances.

Substance use has been a pervasive part of American life from colonial times to the present. Alcohol use and its consequences was such a charged social issue by the 20th century that a constitutional ban on the production and sale of alcoholic beverages was enacted in 1920 and endured until 1933. Around that time, however, alcohol and drug use were already widespread

enough to appear in radio, movies, and other mass media, and have consistently appeared in popular media and culture to this day.[11] By the mid-1900s, treatment and recovery had also gone mainstream.[12] Today, substance use disorder (SUD) is one of the country's most commonly occurring and costly health issues. Nearly 30 million adults in the United States report a lifetime alcohol or other drug problem.[13] By 2017, the opioid epidemic alone had killed nearly half a million people over 20 years and topped $1 trillion in cumulative economic costs.[14] From 1999 to 2020, nearly a million people had died of drug overdoses (including drugs other than opioids, but excluding alcohol).[15] Data from the Centers for Disease Control and Prevention (CDC) suggest that overdose death rates continued to climb through calendar year 2021, during which 106,669 overdose deaths were reported.[16] The annual economic impact of SUD in this country, which was $442 billion in 2020,[17] exceeded the gross national production of all but 26 of the world's 193 economies.[18]

We find ourselves at a critical time when loss of human life associated with SUD has rapidly accelerated and reached unprecedented levels. By necessity, drug policy has evolved over recent decades to embrace a more complex and nuanced understanding of the dynamics of supply and demand and the need for comprehensive public health approaches such as economic and legal considerations; interdiction, law enforcement, education, and youth engagement for prevention; crisis intervention, access to care, provider workforce capacity, and harm reduction; and family, peer, community, and infrastructure support (housing, transportation, employment, health care, etc.) for recovery.

At the same time, research and practice enterprises in the United States have significantly increased general knowledge and understanding of the complexities of substance use and attendant disorders, genesis, responses, and consequences. Broad-based institutionalized research funding by the federal government has helped translate science into both practice and systems-level strategies. Agencies within the U.S. Department of Health and Human Services (HHS) have been key to this initiative, including the National Institutes of Health (NIH) and, within NIH, the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Drug Abuse (NIDA), the Substance Abuse and Mental Health Services Administration (SAMHSA), and various offices within CDC and the Centers for Medicare and Medicaid Services (CMS). Additionally, the U.S. Department of Veterans Affairs (VA) has conducted important research on SUD and treatment among veterans.

2022 Recovery Research Summit Speaker Profile

Ben Garthwaite, MBA

Serves as the CEO of Fors Marsh and guides the company's business growth and diversification. He is committed to evolving company policies and practices so that each of Fors Marsh's key stakeholder groups—community, client, employee, and planet—are positively impacted. Fors Marsh provided support to the 2020 and 2022 Recovery Research Summits, and Garthwaite joined this summit to share the preliminary results of the company-funded national survey research on how workplaces can best support employees in recovery. Under Garthwaite's leadership, Fors Marsh has earned B Corporation certification, is registered to the International Living Future Institute Just label program, and has won numerous workplace climate awards. In addition to external research engagements such as the Recovery Research Summit and Workforce Survey Report, workplace recovery is a crucial part of Fors Marsh's culture. The company offers a comprehensive Workplace-Supported Recovery Program (WSRP) to create a stigma-free, compassionate environment for employees in recovery.

SUD is also a major policy issue for federal, state, and local governments—as both a public health and law enforcement priority. Prevention and treatment of SUD have traditionally dominated both government focus and business activities, leaving pronounced gaps in research, policy development, and funding for SUD recovery support and harm reduction services. However, those gaps are beginning to narrow. In April 2021, the White House's Office of National Drug Control Policy (ONDCP) submitted a congressionally mandated statement of drug policy priorities.[19] The priorities included advancing recovery-ready workplaces and expanding access to recovery support services. The National Drug Control Strategy (NDCS, known as "the Strategy"), released in 2022, was intended to usher in "drug policy centered on individuals and communities." The Strategy outlines specific goals for the federal government such as increasing recovery efforts in the United States, and explores broad public policy across the full spectrum of substance use: prevention, harm reduction, treatment, recovery support services, domestic and international supply interruption, criminal justice and public safety, and data systems and research. "We are changing how we help people when it comes to drug use by meeting them head on, where they are, with high-impact harm reduction services and removing barriers to effective treatment for addiction, while addressing the underlying factors that lead to substance use disorders," said ONDCP director Rahul Gupta, MD. "We are also striking drug trafficking organizations where it hurts them the most—in their wallets—by disrupting the operating capital they need to sustain their criminal enterprise. We need to apply both elements of this approach together, so we can disrupt the trafficking of drugs into the United States while allowing our historic investments in public health interventions to take hold. If it is easier to get illicit drugs in America than it is to get treatment and recovery support services, we will never bend the curve."[20]

Clinical Considerations of SUD

The terms "substance use disorder" and "alcohol or other drug use/addiction" overlap but are not synonymous. Under the Fifth Edition of the Diagnostic and Statistical Manual (DSM-5-TR), individuals who meet at least two of 11 diagnostic criteria qualify for diagnosis with SUD. Based on the number of criteria met, SUD is characterized as mild (two or three criteria), moderate (four or five criteria), and severe (six or more criteria). These criteria (or symptoms) fall into four categories: (1) impaired control, (2) social problems, (3) risky use, and (4) physical dependence. Experts generally concur that severe SUD (six or more symptoms) corresponds to addiction as defined by the American Society of Addiction Medicine (ASAM) and as generally conceptualized by the public: addiction is a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences. People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences.[21]

SUD has the potential to become a chronic, relapsing brain disorder characterized by compulsive drug seeking and use despite adverse consequences. When this occurs, SUD involves functional changes to brain circuits that govern judgment, decision-making, learning, memory, and behavior control.[22] With repeated drug exposure, the brain's reward circuit can adapt to the presence of the drug, making it hard to feel pleasure from anything other than the drug and eventually leading to distress and, potentially, to physical withdrawal symptoms in its absence. Stressful feelings like anxiety, irritability, and unease characterize withdrawal after the euphoric effect fades. These feelings, combined with a craving for and obsession with the drug and, with certain drugs (e.g., alcohol, opioids, or barbiturates), powerful physical withdrawal symptoms, motivate the person to seek the substance again. Over time, a person with SUD uses alcohol or other drugs not to experience pleasure, but rather to get temporary relief from this discomfort.[23,24] The continuing

use of substances impairs an individual's ability to exert self-control; this impairment in self-control is the hallmark of SUD.

Much contemporary research considers three factors to be dominant in SUD: biology, psychology, and social influences. Risk factors for SUD begin with biology, with genes accounting for about half of a person's risk.[25] A family history of SUD also influences the risk of substance misuse, with SUD frequently affecting multiple members within families and over generations. Thus, like type 2 diabetes, asthma, and common forms of cardiovascular disease, SUD emerges from the interplay of genetic and environmental factors. The transition between stages of use—from regular use to misuse and SUD—is also genetically influenced, although the relative genetic contribution compared with environmental influences varies by substance.

At the beginning of the Human Genome Project's exploration of the human brain, Alan Leshner, MD, director of NIH and NIDA and CEO of the American Association for the Advancement of Science (AAAS), pointed out that drug use is a preventable behavior whereas SUD is a chronically recurring, but treatable, disease of the brain.[26] The fact that continued substance use, despite life-altering consequences, is involuntary has been validated through epidemiology and through neuroimaging that shows functional and structural changes to the living brain as a result of chronic exposure to substances known to lead to SUD. This evidence has significant implications for public perception of SUD and has reduced stigma and empowered individuals living with SUD to achieve success in dealing with their disorder. A better understanding of SUD and its identifiable stages has enabled the targeting of interventions tailored to different phases of the disease continuum. The genetic component of SUD has permitted new approaches to addiction medications and the development of precision medicine that potentially matches interventions to certain genotypes and improves outcomes more efficiently and cost effectively. As with other chronic diseases, treatment for SUD is not a cure. SUD treatment enables people to counteract the disorder's disruptive effects on their brain and behavior and regain control of their lives.[27] Long-term recovery from SUD through management of one's vulnerability to return to use is possible and is achieved by people with these disorders every day.

Recovery Milestones

- Initial: 0–3 months—interruption/cessation of substance use, with or without formal treatment
- Early: 4–12 months—relapse prevention (avoiding triggers, learning alternative responses, committing to courses of action that prevent relapse)
- Sustained: 1–5 years—practicing conditioned behaviors to prevent relapse, building a personal recovery community
- Stable: 5+ years—extinction/deactivation of dependency/addiction

Nonetheless, there are many neurophysiological challenges that make it difficult for people to establish a foothold in remission. For example, increased sensitivity to stimuli and a decreased capacity to experience normal levels of reward and pleasure (anhedonia) persist after detoxification and initial stabilization. These result from chronic substance exposure that changes the brain through neural adaptations: the increased sensitivity can lead to impulsive reactions to stressful situations and the decreased reward system makes it difficult for individuals in recovery to be motivated by future benefit. Together, these challenges constitute a real threat to sustained recovery.

In his pioneering work on general adaptation syndrome—the three-stage process that

characterizes physical changes that the body goes through in response to chronic stress—Hans Selye, MD, first connected hormonal and other physiological changes in the body to external stressors.[28] These stages are alarm reaction, resistance, and exhaustion.[29] For someone living with SUD, the alarm reaction might occur because of a traumatic event related to their substance use. An accident, an arrest, a dangerous social interaction, or another negative experience can trigger a strong desire to change. After the initial shock of this triggering event, the individual enters the resistance stage, in which they endeavor to sustain the change they desire. This stage is complicated for those living with SUD because they are experiencing physical withdrawal, loss, psychological and social effects of breaking behavioral patterns, and in many cases, a continuation of the very stresses that contributed to their substance use in the first place. The final stage of the syndrome is the exhaustion stage, in which the individual who has lived with stress for prolonged periods experiences hopelessness, fatigue, and possible physical illness because of the debilitating effect stress has on the immune system. For those with SUD, this phase often includes the triad of insomnia, irritability, and an inability to concentrate as part of post-acute withdrawal. SUD patients learn over time that they can almost immediately relieve their pain by resuming use, so the desire to use can get stronger the further they get from the traumatic event that incited the desire for change. Recovery capital—the internal and external resources that an individual can assemble to achieve and sustain recovery—is essential to achieving sustained SUD recovery. Those with limited recovery capital can reach the exhaustion phase much more rapidly because they lack the resources to continue resisting. However, the exhaustion phase can be avoided; people with access to sufficient support have the greatest chance for sustained remission that enables them to live healthy, lower-stress, productive, and stable lives.

2022 Recovery Research Summit Speaker Profile

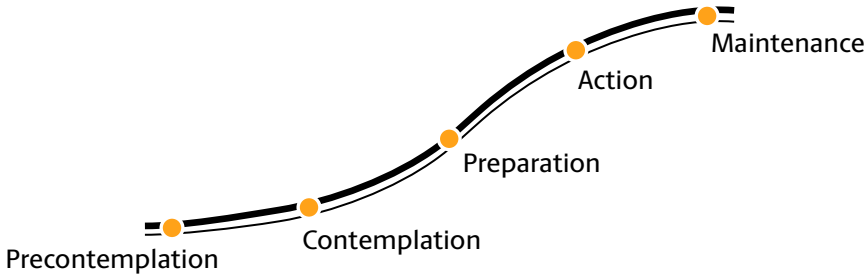
Ashli J. Sheidow, PhD

Understands the importance of implementing evidence-based practices that center on the lived experiences of people who have substance use and mental health challenges. A senior research scientist and science director at the Oregon Social Learning Center, she focuses her research on recovery services and treatment for adolescents and emerging adults, particularly those with co-occurring disorders or legal system involvement. Sheidow is associated with more than 80 publications, most funded by the National Institute on Drug Abuse (NIDA) and the National Institute of Mental Health (NIMH). She contributed to discussions on a wide range of topics at the 2022 Recovery Research Summit, such as recovery priorities and values among adolescents and emerging adults and how treatment and recovery models for youth differ from those typical for adults.

Several studies have demonstrated the importance of motivation for treatment among individuals with SUD in predicting treatment participation and recovery. "Readiness for treatment" refers to the motivation of an individual with SUD to seek help and their preparedness to engage in treatment activities. It can impact treatment attendance, compliance, and outcomes. Greater participation in and compliance with treatment predict better behavioral change outcomes. And although readiness for treatment can be elusive, and its absence can be frustrating and heartbreaking for the people who love and care for individuals with active SUD, it can also take hold at any time.[30]

Contemporary research has also improved understanding of steps that both lead to and comprise behavior change—an important consideration in developing interventions and resources that are effective for different stages of SUD. One model that identifies processes to help people make and maintain change is

Transtheoretical Model of Behavior Change



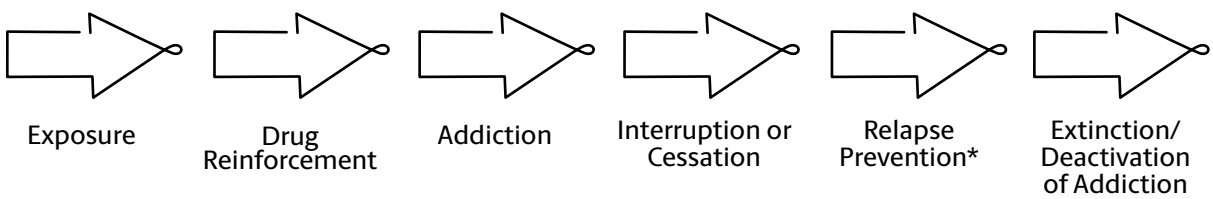
the transtheoretical model of behavior change.[31] This model defines six stages of change that can be applied to the progression from SUD to sustained recovery. Like SUD itself, however, this progression is not a one-size-fits-all model and must be modified to account for psychosocial and environmental factors.

Social learning theory, as proposed by social cognitive psychologist Albert Bandura, PhD, considers that learning is a result of observing, modeling, and imitating behaviors, attitudes, and emotional reactions of others, mediated by both environmental and cognitive factors.[32] W.E. McAuliffe, PhD, applied social learning principles to relapse recovery. His Recovery Training and Self-Help (RTSH) aftercare modality comprises weekly recovery training, a weekly self-help session, structured recreational and social activities, and a support network of peers in long-term recovery.[33] The program systematically addresses predictable causes of relapse and relies on trained staff and peers to model desired behaviors and support continued abstinence and social reintegration. Randomized controlled trials of the program showed that it significantly reduced the probability of opiate relapse.[34]

Research on effective tools, strategies, and supports that help individuals initiate and maintain recovery, as well as events and influences that may derail the process, are essential to identifying and normalizing best practices that can provide maximum support at various times and in various phases of SUD recovery. Additional research on models related to health behaviors, decision-making, and other factors affecting sustained recovery has been and is essential to the continued growth of evidence-based practices for SUD management.

A frequent element of recovery from SUD is the recurrence of symptoms. These may lead to a return to use. SUD symptoms can occur after a period of abstinence and after an individual has acknowledged the nature and extent of the SUD, committed to recovery, and reduced or eliminated inducements to use. Individuals who relapse need help in reducing feelings of shame and identifying barriers to success, and they need to thoroughly explore their relapse triggers and

McAuliffe's Social Conditioning Model of Recovery[35]



*Relapse prevention is the clinical application of conditioning theory that comprises identification/avoidance of triggers, learning alternative responses, commitment steps that bind one to a course of action and help resolve ambivalence, the development of a personal recovering community, and extinction or deactivation of dependency/addiction.

events around the decision to use. When a person returns to use, there is evidence of increasing vulnerability to use before it occurs. This vulnerability may be brought on by reduced adherence to the program of self-help that enables them to manage their recovery, or by reactions to external pressures and stresses. No matter the cause, those who return to use must repeat some of their early steps to reinstate abstinence and re-initiate recovery.

As a genetic disorder with biological, behavioral, social, and spiritual consequences for both patients and their families, SUD follows a more variable course along the continuum of exposure, illness, treatment, and recovery than do many other chronic diseases, yet there is broad predictability in the condition. Both awareness of the disorder and capacity to change its course are present in varying degrees throughout the phases of the disease continuum. Research on effective tools, strategies, and supports that help individuals initiate and maintain recovery, as well as events and influences that may derail the process, is essential to identifying and normalizing best practices that can provide maximum support throughout SUD recovery.

Chapter 2:

Pathways to Recovery

For many decades, recovery from substance use disorder (SUD) was measured using negative markers: cessation of and abstinence from all substance use. Today, multiple definitions of recovery populate discourse and research, but a common element in many is the characterization of recovery as a positive process—the voluntary adoption of changes and values that enables individuals to manage their lives without using substances. This includes the use of the term "recovery capital," defined as the internal and external resources a person with addiction can use to enter remission and sustain their recovery from addiction.[36] "Social capital" is defined as the networks of relationships among people who live and work in a society, allowing the society to function effectively.[37] Through social capital, groups of people share their sense of identity, norms, and values, resulting in deeper trust and cooperation. Social capital forms part of recovery capital[38] and is essential to people in recovery. The current concepts of recovery capital and social capital are related to other models and frameworks that identify needs that must be met for individuals to reach a state of well-being. Abraham Maslow, PhD,[39] in his well-known "hierarchy of needs," showed five levels of needs, each identifying the conditions required for individuals to improve their health, happiness, and self-actualization. William Cloud, PhD, and Robert Granfield, PhD, separated the concept into four domains: social, physical, human, and cultural.[40] Other researchers and clinicians divide recovery capital into different domains with other titles and more or fewer components. The underlying concepts, however, are universal. Among several psychometrically validated assessment scales that evaluate a person's available recovery-supporting resources and identify their areas of risk is the self-scored Assessment of Recovery Capital (ARC) scale, created by William White, MA.[41] The ARC scale relates to other level-of-care placement scales, such as the American Society of Addiction Medicine's Pretreatment and Pre-diagnosis Evaluation Criteria (ASAM PPC), in which treatment is indicated or contemplated in lieu of self-directed care. The recovery capital scale most directly converts to areas assessed by the ASAM PPC under the "recovery/living environment" dimension, one of six dimensions evaluated by ASAM.

Building on these advancements in assessment and self-evaluation, Peter Gaumond, MA, who headed the Office of National Drug Control Policy's (ONDCP) Recovery Branch, said at the 2022 Recovery Research Summit, "If you look at remission, it's an absence of symptoms. If you look at abstinence, it's the absence of a behavior. Recovery is defined by what it brings; it's a positive. So, if you accept that it's a process, it only makes sense that recovery is not characterized by one specific thing or one step in the process."

Among the first institutions to adopt this view was the Substance Abuse and Mental Health Services Administration (SAMHSA). In 2010, SAMHSA convened a diverse group of recovery stakeholders to develop this definition of recovery: "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."[42] Participants identified what they saw as four major dimensions of recovery: home, health, purpose, and community.[43] During the Summit, SAMHSA Director Miriam Delphin-Rittmon, PhD, offered this additional insight: "Qualitative data suggests that there are multiple pathways to recovery, that people often describe many different processes, many different factors that impact their recovery journey and their recovery processes." SAMHSA's definition of recovery has, in many ways, been built on the fact that people describe a wide range of processes at the community level, all of which help to advance recovery.

2022 Recovery Research Summit Speaker Profile

John Burns, MBA

Is a person in long-term recovery and directs SOS Recovery Community Organization (RCO), which has 3 recovery community centers (RCC) in New Hampshire. In 2014, he founded Families Hoping and Coping, a peer-based support group for families and friends of those struggling with substance use disorder (SUD). As a member of the Motivational Interviewing Network of Trainers, he participates in motivational interviewing workshops within the peer-recovery support service field several times a year. An outspoken advocate for people who use drugs, Burns spoke at the 2022 Recovery Research Summit about the importance of recovery-oriented systems of care and promoting diversity, equity, inclusion, and justice for people who are underserved and most affected by punitive drug policies.

Expanding upon SAMHSA's definition, the National Institute on Drug Abuse (NIDA) includes the following: "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. Being in recovery is when those positive changes and values become part of a voluntarily adopted lifestyle."[44] During the Summit, NIDA Director Nora Volkow, MD, said, "We cannot speak to just one type of recovery. Recovery is a process and it's likely to vary depending on the conditions of an individual." She explained that research shows "that what may be recovery for one person may not necessarily be for the other," and that "for one individual, recovery may take the form of complete abstinence from use of substances, while another's recovery may take the form of sustained treatment and strengthening of their recovery capital support systems." To further support this point, Volkow explained that researchers at NIDA have "recognized the enormous need to start [developing] tools [based on] measures that can actually quantify the different trajectories of recovery" and consider the many different challenges faced by people who are using drugs.

Other Summit participants added to the conversation of recovery as a positive process. According to Jalie Tucker, PhD, director of the University of Florida's Center for Behavioral Economic Health Research, "One of the common elements of today's recovery definitions is the emphasis that they place, not on changing substance use and symptom reduction or remission, but on improvements

in life, functioning, spirituality, relationships, physical health, and so forth. And that piece has been almost amputated from many formal treatment approaches. Treatment can be all about getting people to abstain, sometimes to the point that they can't even get in the program if they don't abstain first. In the professional treatment domain, the focus has been about changing the substance use and not about attending to these other areas of life functioning. Then treatment ends, and they send people back out into the environment in which these problems developed. But with this growing focus on recovery as a sustainable process, I think we're at a tipping point."

At the heart of recovery are the following truths: (1) Recovery is a journey that begins when individuals with SUD decide to embark on it, and (2) others are not equipped to judge the validity of people's choices of recovery pathway or whether those choices determine if they are in recovery. Neither the length of time in recovery nor the methods of recovery are adequate measures or definitions of the process itself.

Most definitions of recovery include the following elements:

- People who are recovering intend to pursue remission from active addiction;
- Recovery is associated with improved mental and physical health;
- People in recovery experience better relationships and improved function at work, school, and in leisure activities; and
- Those in recovery become more responsible members of their communities.

Taking a more expansive view of recovery allows us to embrace and understand the words of Phillip Valentine, RCP, executive director for the Connecticut Community for Addiction Recovery and respected authority on the subject, who famously says, "You are in recovery if you say you are."

Andrea G. Barthwell, MD, a leading addiction medicine specialist and moderator of the Recovery Research Summit, defines treatment outcomes as pathways to recovery. Essential outcomes include:[45]

Mental peace: Addiction no longer governs feelings, thoughts, or behaviors. Those who have SUD shed feelings of uselessness and hopelessness. New tools discovered in treatment replace feelings of self-doubt, insecurity, and fear, and allow people in recovery to manage situations in which they failed in the past. Relationships with friends and family can be healed, and the relationship with oneself provides a way to accept life's challenges and achieve peace.

Physical well-being: Treatment supports the mind–body connection. Addiction is a brain disease, and the therapeutic work done in treatment leaves clients feeling physically fit. Through their experiences in treatment, clients have the proper means to support a healthy, balanced lifestyle in recovery, including exercise and nutrition, and feel proud about the growth they have achieved.

Personal productivity: Treatment teaches that recovery is continual growth. Along the path of the treatment process, treatment professionals help clients acknowledge strengths that can be employed to live to their potential in recovery. More importantly, treatment participants will be able to accept and acknowledge these strengths without self-doubt and insecurities skewing

their self-perspective. Participants are encouraged to embrace and employ their strengths, and to continue their growth from the gains made while in treatment. Continuing care recommendations include fostering and using these strengths in a manner that allows clients to maintain long-term recovery while living to their fullest potential.

There are various recovery pathways available to those with SUD. Multiple treatments have proven effective for various types and stages of SUD. Evidence-based treatments include counseling, psychotherapy, organized outpatient and inpatient treatment programs, and medication-assisted treatments. A host of activities that can include mutual support groups such as 12-step programs comprise recovery support both post-treatment and during self-directed abstinence. People often use more than one type of treatment and mutual support resources during their recovery journey. Some with severe, chronic forms of SUD who have few resources need help from people who can: (1) reach out to them or offer harm reduction services (pre-treatment care) before they can be engaged, (2) offer hope and support, and (3) motivate them to enter treatment and join with the community of people in recovery.

Many treatments have been tried and many have shown high degrees of efficacy, but few treatments are taken off the market when they are shown to be less than effective or not as effective as other strategies. At the same time, a rigid one-size-fits-all approach to SUD treatment may set some individuals up for failure rather than help them find the path that will work for them. For example, agonist drug treatment (e.g., buprenorphine or methadone for heroin, nicotine gum or patches for smoked nicotine) or treatments that block the receptor (e.g., naltrexone, a long-acting opioid mu-receptor antagonist that occupies the receptor and blocks heroin's effect at the site of desired action in the brain) are available to address receptor function in the brain. An unyielding abstinence-only approach closes off the possibility of solutions more carefully tailored to accommodate individual needs. For example, research consistently shows that motivations for recovery and desired recovery outcomes differ markedly for adolescents and young adults than for older adults. People with different life experiences, levels of engagement, and access to resources may need more support in one area than another. For those whose needs do not align perfectly with treatment and recovery programs with hard and fast expectations of abstinence, feelings of defeat and failure can encourage a return to use. Without reducing the harm of use (risk of exposure to infectious diseases, arrest, engagement in behaviors that are toxic, etc.), severe consequences that change the trajectory of those individuals' lives can also create risk. This is where harm reduction enters the equation.

Harm reduction is a key element of overall strategy for managing SUD; it can help to move people living with SUD further away from risk and closer to avenues that will

2022 Recovery Research Summit Speaker Profile

Amy Mericle, PhD

A research scientist in the Alcohol Research Group at the Public Health Institute, "spend[s] a lot of time thinking about the substance use continuum of care and how we can expand [it]." Her work focuses on identifying unmet needs for treatment and recovery support services and examines innovative approaches to meet those needs. As an addiction health services researcher, she has most recently worked on projects and publications on the availability and accessibility of recovery housing, as well as its role in improving outcomes for people recovering from substance use disorder. She presented at the 2022 Recovery Research Summit on social determinants of health related to recovery—such as the provision of recovery strategies that suit the needs of specific communities and populations, including gay and bisexual men.

help them begin their own personal recovery journey. Initiatives such as widespread availability of Naloxone to prevent drug poisoning death, as well as other harm reduction programs that reduce transmission of infectious disease, improve overall health, and provide easy and barrier-free access to social services and treatment, can not only save lives but can deliver options to help people with SUD see beyond resolution of the immediate crisis.[46]

Harm-reduction services have finally been offered as one option to engage with individuals who want recovery. The full spectrum of harm reduction comprises policies, programs, and practices that aim to reduce the harms associated with the use of alcohol or other drugs. The defining features include a focus on the prevention of harm rather than on the prevention of substance use itself, with attention paid to the individual's active substance use (e.g., a syringe services program can reduce rates of transmission of hepatitis C, HIV, or other infectious diseases for individuals with heroin use disorder). Abstinence-based treatment and interventions are true demand-reduction services, or treatment. A government policy of demand reduction seeks to achieve absolute cessation of use and might be viewed as being in conflict with practices and services that seek to help individuals who have not, or not yet, decided to stop using substances as their form of recovery. However, harm reduction, as supported by government-based policy, is pre-treatment care, with an emphasis on providing individuals who have SUD with care intended to sustain life and health. Although policy recognizes that harm reduction does not achieve absolute demand reduction, it nonetheless contributes to it and is the humane way to deal with an individual who has an active SUD and does not accept treatment.

To gain insight into various types of integrated care, the National Institutes of Health (NIH), in conjunction with NIDA, has created the Recovery Research Networks, a hub for researchers all over the United States. The hub is designed to gather information on models of care that link interventions aimed at crisis response to steps that encourage treatment and recovery. Pre-treatment advances, such as motivational interviewing, and relapse prevention therapies, as well as advancements in the development of addiction medications, help alleviate suffering and improve the likelihood of sustained recovery. The network aggregates data on initiatives that will be valuable for identifying best models of care and for informing policy on issues such as reimbursement criteria.

As an example, engagement with SUD patients within health care settings can encourage movement into treatment and recovery. As a result, comprehensive models of care that consider the space beyond intervention at the moment of crisis are beginning to emerge. Volkow spoke at the Recovery Research Summit on the unique opportunity offered by hospital emergency departments—and how that opportunity is underused: "A relatively small percentage of hospitals have access to addiction consults, even though integrating this type of care means patients basically can start SUD treatment while they're in the emergency room. There, they can be incentivized to choose a healthier lifestyle—the first step toward recovery." Yet there are numerous obstacles to providing this level of care. "If you're treating a patient in the emergency department and you just get fixed reimbursement for, say, reversing an overdose, and that's it, you lose the opportunity to initiate buprenorphine and engage with a recovery coach or conduct an addiction consult or intervene with a peer navigator or coach at the precise time a person might be highly motivated to think about treatment and recovery," she explained. Research on such models of care during treatment and recovery is also lacking, although several federally funded research projects are under way or have been completed to evaluate effectiveness of multiple interventions.[47,48,49]

2022 Recovery Research Summit Speaker Profile

Andrea G. Barthwell, MD, DFASAM

Is a former deputy director for demand reduction at the Office of National Drug Control Policy (ONDCP), where she worked under President George W. Bush to support the publication of science-based facts about the dangers of marijuana use and the harms of drug legalization. Barthwell's research interests include effectiveness of in-office care for patients with opioid use disorder (OUD) and advocacy for access to both methadone and buprenorphine. Her public service includes working on the Food and Drug Administration (FDA) Drug Abuse Advisory Committee and on the national advisory councils of the National Institute on Drug Abuse (NIDA), National Institute on Alcohol Abuse and Alcoholism (NIAAA), and the Substance Abuse and Mental Health Service Administration's (SAMHSA) Center for Substance Abuse Treatment. She was the panel facilitator at the 2022 Recovery Research Summit and coordinated discussion on a wide range of topics related to recovery research.

One important conclusion that has been validated frequently in research on recovery from SUD is the impact of recovery capital on the ability to apply lessons learned in treatment, or through self-reflection, to build on gains made and continue to make progress. Recovery capital includes external resources such as safe, substance-free housing and workplaces; peer and community support organizations; transition services for those who have completed treatment, are released from incarceration, or are recovering from homelessness; and access to health care, as well as internal resources such as optimism determination, and resilience, that combine to help those in recovery achieve stable, independent, and fulfilled lives. The extraordinary potential of robust recovery capital to facilitate sustained recovery—and how lack of recovery capital can impede sustained recovery—are both well-documented in the literature. Those with SUD operate in a complex psycho-social environment in which powerful forces that work to maintain their using behavior can easily overwhelm their intention not to use. Individuals in recovery who are exposed to high-risk environments where they live, work, attend school, or socialize face significant challenges in achieving ongoing remission. External elements of recovery capital enhance quality of life and peace of mind and help those in recovery to strengthen their internal recovery capital. It is significant that the effects of recovery capital are reciprocal. More recovery capital facilitates actions to prevent stress from becoming distress. This translates to less physiological and behavioral stress, which leads to longer remission, enabling those with SUD to increase their own recovery capital naturally. Essentially, more external recovery capital in any form will perpetuate an increase in one's internal recovery capital.

In the same way that other organisms under stress can heal and recover through natural processes in environments where they have access to essential survival elements, creating the right conditions for people recovering from SUD helps the human organism maximize its ability to repair and recover naturally. John Kelly, PhD, the Elizabeth R. Spallin professor of psychiatry in addiction medicine at Harvard Medical School and founder and director of the Recovery Research Institute at Massachusetts General Hospital, where he is also the associate director of the Center for Addiction Medicine, defines a recovery capital model to support this process. In the SANER approach, four elements create the right conditions to enhance natural repair: social environment, activity, nutrition, and emotion regulation. Enhancing the social environment with safe living and working spaces, mutual support organizations, peer-to-peer interactions, and faith-based or secular support programs builds recovery capital. Activity, including school and work, provides structure and is crucial to recovery. When those activities occur in an environment

that supports recovery, such as recovery friendly workplaces, high schools, and colleges, recovery capital increases. Nutrition includes feeding body and mind with healthy input obtained both independently and by surrounding oneself with others who can provide healthy input. Finally, emotion regulation, including therapies and other practices that build, strengthen, and expand methods of coping with life's challenges, rounds out this SANER approach. Other variables, such as being responsible for another living thing or having the opportunity to achieve a long-held goal or dream, can also provide significant support for the decision not to use.

Research is beginning to identify the impact of recovery capital on the broad recovery trajectories and milestones that are applicable to large segments of people in recovery from SUD. A national recovery survey examining 40 years of recovery in a representative sample of the adult population in the United States shows that when indices of well-being and functioning increase, psychological distress decreases. Conceptually, the initial goal of resolving a substance use problem to avert negative consequences, including reducing the likelihood of death and disability, may shift toward achieving personal growth and contributing positively to society and community. Individuals resolving significant alcohol or other drug problems experience functional improvements and increasing satisfaction in physical, psychological, and social areas of life, and while these positive shifts generally are more rapid in the early recovery years, they continue to improve over ensuing decades.[50]

People in recovery have also provided insights into the recovery process. One of the most widely recognized tomes, *Alcoholics Anonymous* (AA), also known as the "Big Book," describes and suggests a recovery journey.[51] This handbook presents every detail of the AA program for recovery from alcoholism. First published in 1939, it was designed to show others with alcohol use disorder (AUD) how the first 100 people of AA achieved recovery. Now translated into over 70 languages, it is still considered AA's fundamental text. The collective strength, hopes, and experiences of the original 100 contributors and subsequent revisions that have maintained adherence to the principles and guidance of the original have provided a recovery blueprint for millions of people. Other insights from people in recovery can be found in Canada's *Life in Recovery Survey*,[52] which documents experiences reported by hundreds of people who self-identified as having a past problem with a mood-altering substance, but reported they would no longer meet the criteria for an SUD. Despite the conventional wisdom that returning to use is a common part of the recovery journey, over half of the respondents reported never having a single relapse after embarking on their recovery journey. Studies in Australia, the United Kingdom, and the United States have found similar results. In addition to embarking on a program of recovery

2022 Recovery Research Summit Speaker Profile

Andy Finch, PhD

Was a panel moderator at the 2022 Recovery Research Summit, facilitating discussion on the essential role certain sectors play in the development of a recovery-ready nation, the evolution of these sectors, and the needs these mission-specific sectors have to thrive in the recovery space. Finch is a professor of practice in the Department of Human and Organizational Development at Vanderbilt University's Peabody College and serves as a core faculty member in the Human Development Counseling program. He co-founded the Association of Recovery Schools in 2002, was a lead researcher on two National Institute on Drug Abuse (NIDA)-funded national studies of recovery high schools, and helped write accreditation standards for recovery high schools. He also helped found Vanderbilt University's collegiate recovery program in 2007 and currently serves on its advisory committee.

Both in AA and in other types of recovery journeys, there are some overarching principles that may improve the odds of success for individuals who want to embark on a recovery journey. They are:

1. There are many pathways of successful recovery.

2. Recovery is not something we can prescribe or force on others, however, we can educate, motivate, lead, and support their desire for change. While the choices and effort required are individual responsibility, instilling hope, clarifying the extent and nature of the problem, elucidating potential responses, and bolstering the ego to resist stigma and judgment can assist individuals in their efforts at recovery and support early successes.

3. The paths to recovery are broad, involving all aspects of health and wellness. Recovery is a journey, not a destination.

4. Recovery does not occur in a vacuum; rather, it requires connection and support from family, peers, the recovery community, and knowledgeable professionals.

5. SUD is a biological, psychological, social, spiritual, and familial disorder. All of these domains are involved in the disease process and need to be engaged in the recovery process.

without relapse, many individuals described dramatic improvement in the quality of their lives, relationships, work, and health after participating in a recovery program.

The most common form of recovery is natural recovery. Natural recovery occurs when individuals sustain recovery without formal help. This may appear spontaneous, but it often occurs after a retrospective analysis of what has been lost due to substance use and the realization that there will be catastrophic losses in the future if substance use continues. Those who experience natural recovery find the motivation to live and can articulate the exact and true nature and extent of their disease. They use their resources, coping skills, and supports—their recovery capital—to assist them with the analysis and response. Often these individuals are underrepresented, or not counted at all, in population health and addiction studies.[53]

Some individuals who are on the verge of having significant problems with SUD pull themselves back from the brink and may go on for years with moderation management. Many professionals trained in SUD have difficulty believing that moderation management can work for some people and instead, do not believe that they meet the criteria for diagnosis of SUD. This is, in large part, a futile debate. Regardless of whether the recovery community accepts that natural recovery and moderation management are part of the equation, it is important that individuals on those recovery paths know that there are programs and resources available to them should they find that they can no longer be successful on their own. For many people who rely on moderation management, there is a point in the progression of SUD when the brain alone can no longer control the behavior reliably. At this point, abstinence becomes more achievable than cutting down and attempting to control use, and the recovery community has a large portfolio of strategies to help people with SUD achieve and sustain abstinence.

Next to natural recovery, peer-assisted recovery is the most common form of recovery.[54] Peer recovery support services (PRSS) provide non-clinical assistance to support long-term recovery from SUD. PRSS employ recovery coaches who use training and lived experience to help others

achieve and sustain long-term recovery. A frequent alternative to clinical treatment, PRSS from state and local agencies, as well as nonprofit organizations, function as the primary support resource for tens of thousands of individuals in recovery. Self-help and mutual help organizations also offer an alternative to formal treatment—in 12-step meetings, Self-Management and Recovery Training (SMART) recovery, LifeRing Secular Recovery, Women for Sobriety (WFS), and similar programs. A recent offering is faith-based recovery where religious organizations offer recovery support, usually through Bible-study groups and individual instruction. Some Native American tribes use belief systems to support positive change and restoration of one's life. A common thread among these resources is identified by the acronym CHIME: Connectedness, Hope, Identity, Meaning, and Empowerment. These are the conditions that promote recovery, according to Mary Leamy, PhD.[55] Research also shows—and the AA recovery timeline illustrates—that the inflection point in SUD recovery that represents a significant and sustained change in the increase of well-being and the decrease of stress occurs around the 5-year mark. This means that the first 5 years are a crucial period, where risk is elevated and the level of recovery capital has enormous potential to sway the outcome. This same type of research is beginning to spotlight the finer details of recovery's path, including periods of heightened risk that are emerging at the micro level. For example, at about the 6-month mark, there is a dip in the rate of sustained remission, possibly due to dawning awareness of the long journey ahead. These kinds of insights, even when they are preliminary, enable institutions, organizations, and individuals to plan for challenges and tailor various elements of recovery to provide the most help when they are most needed.

Conventional wisdom and decades of experience have shown that there is a predictable set of questions that emerge as recovery progresses from year to year in the first 5 years:

Year	Key questions	Recovery goals
1	• How was I powerless? • How did unmanageable effects of my substance use manifest?	• Grow my commitment to recovery • Examine my relationship to substance of choice • Accept myself as an individual with SUD
2	• Who am I? • How did I get here?	• Examine my relationship with family • Explore negative consequences of substance use • Restore personal control
3	• What kind of people do I need and want in my life?	• Move beyond old relationships that enabled substance use and build a new inner circle • Make amends to self and those who were harmed by my substance use • Accept loving forces in my life
4	• Why did I survive? • What can I contribute to my community?	• Stay focused on ways to manage vulnerability every day • Extend relationships beyond my immediate recovery community
5	• What is my higher purpose? • What can I contribute to the world?	• Examine my relationship with a higher power or a world larger than self • Find a purpose • Restore balance in my life

If there was a universally effective formula for everyone with SUD, recovery would be a much more predictable and attainable state. However, as they start to feel better, individuals in early

recovery can find rigorous adherence to a program that created stability in life too constraining and are tempted to discard it for the simple pleasures of that new life. Instead of calling a sponsor or going to a meeting, they might decide to go to the movies with new friends. As more and more recovery-focused activities are replaced by activities that are safe for people without vulnerability to and a history of substance use, the routines of recovery slip away, sometimes so swiftly and elusively that the individuals in recovery never see it coming. Therein lies the importance of people in recovery surrounding themselves with peers and mentors who have similar lived experiences and who can function as a barometer when distorted thinking, often referred to as "stinking thinking" in AA, sets in. The natural enemies of continued recovery progress are denial, pride, and an unrealistic self-image that leads people to believe that they are more powerful than they are. This experience, when it happens, frequently occurs around year 3, when adherence to the principles of recovery as the guiding force behind every personal decision gives way and a relapse occurs, requiring re-initiation of recovery-focused activities and lifestyle. Often it is scary, sometimes it is fatal, but it always requires a renewal of commitment and close attention. Nevertheless, the relapse or near-relapse does not void all efforts put forth to that point and the trajectory can be re-established without loss of gains that were made to date.

2022 Recovery Research Summit Speaker Profile

Christine Timko, PhD

Is a health services researcher with the Department of Veterans Affairs (VA) and Stanford University School of Medicine. She advocates for supporting recovery wherever people are, including treatment for adolescents that is linked with recovery care at school. She works to facilitate patient transitions between different types of care, such as from formal treatment to mutual help/self-help programs. Her research centers on methodologies that improve quality of care for patients with substance use disorder (SUD), including for military veterans with civil and criminal legal problems and family members and friends of adults with SUD and mental health disorders. At the 2022 Recovery Research Summit, she discussed supporting natural recovery with additional intervention strategies such as mutual aid groups.

Between years 5 and 10, people in recovery continue to grow into their new status and the promises[56] and signposts along the way begin to be realized. To maintain and build on the recovery status, William E. McAuliffe, PhD,[57] has developed a four-prong program that comprises "being clean,[58] social relations, highs and lows, and work and growth." Being abstinent explores activities to deactivate craving, identify and avoid dangerous situations, build refusal skills, and understand the role that sleep and pain play in relapse vulnerability. Social relations define social life, love and intimate relationships, and recovery and the family. Highs and lows explore how feeling good and/or feeling stressed can become relapse triggers. Work and growth explore the phases of recovery, managing a return to work, and looking ahead at a life with vocation and meaning.

Barthwell, who is a former deputy with ONDCP and founder and CEO of a comprehensive wellness center for SUD treatment, draws a clear distinction between the ongoing process of recovery and remission. For remission from SUD to be achieved, she says, there must be:

- An acknowledgment of the problem (knowing);
- A commitment to recovery (feeling); and
- Reducing or eliminating inducements to use substances (acting).

Once those components are in place, the disorder can be considered in remission. Return to use before remission is achieved is considered a continuation of substance use with interruptions for treatment, incarceration, or other actions that sequester patients from substance availability. The National Drug Control Strategy (NDCS, known as "the Strategy") echoes that concept: "Because recovery is a process, and not an event, it generally begins before substance use is stopped, continues after the cessation of use, can be sustained through a return to use, and may accommodate reduced levels of use when these permit improvements in health, wellness, and functioning. Recovery is measured as a positive—by what it brings, including improved quality of life, a sense of self-efficacy and purpose, and improvements in social and emotional functioning and well-being. It is distinct from both abstinence and remission, which are measured by the absence of symptoms." The Strategy also stresses the need to identify intervention opportunities and enhance recovery support services to help individuals with SUD navigate their own recovery trajectories, especially during early stages when risks are heightened.

Barriers to Recovery

Social determinants of health—non-medical factors that influence health outcomes—play a significant role in SUD recovery. Disparities in income, wealth, education, transportation, access to care, health literacy, community and workplace safety, and other environmental and social factors help determine the degree to which people can live healthy lives. Historical discrimination due to cultural, racial, ethnic, or religious characteristics exerts an enduring influence on health outcomes. In the United States, public infrastructure, geographic region, urban or rural residence, immigration status, and community resilience also contribute to the potential for positive health outcomes.

Data from the Centers for Disease Control and Prevention (CDC) in 2020 showed higher drug overdose death rates in urban counties than in rural counties.

The 2021 National Survey on Drug Use and Health (NSDUH) documented some of those disparities. Among people who needed SUD treatment, non-Hispanic White people received treatment nearly a quarter of the time (23.5%) while Black and Hispanic people received treatment less (18.6% and 17.6%, respectively).[59] The 2018 edition of the survey showed that sexual minority adults ages 18 and older reported past year alcohol use, marijuana use, opioid use, and prescription opioid misuse at higher rates compared to the overall adult population.[60] Data from the Centers for Disease Control and Prevention (CDC) in 2020 showed higher drug overdose death rates in urban counties than in rural counties.[61] Although poverty has not been found to be causative for SUD, there are correlations between socioeconomic status (SES) and substance use. Research on family SES and substance use has shown that young adults with the highest family income, wealth, and parental education are most prone to alcohol and marijuana use.[62] At the same time, other research has found that opioid overdoses in the United States at least up to 2015 were concentrated in ZIP codes with higher rates of poverty and unemployment as well as lower education and median household income.[63] And while immigrants use alcohol and drugs and meet criteria for SUD at far lower rates than do U.S.-born individuals,[64] language, legal, and stigma-based treatment and recovery barriers have been documented for Latino,[65] Asian American and Pacific Islander,[66] and Arab American populations.[67]

Promoting health equity and decreasing disparities and discrimination are essential to reducing the impact of social determinants of health on SUD recovery. The federal government has long prioritized these goals across its agencies. For example, the U.S. Department of Health and Human Services (HHS) Healthy People initiative provides 10-year measurable public health objectives and tools to help track progress toward achieving them; an overarching focus and one of five key goals of Healthy People 2030 is addressing social determinants of health.[68] SAMHSA's disparity impact strategy increases identification and monitoring of behavioral health disparities and implements changes to reduce them, specifically in its grant program. The agency also builds the capacity of community-based organizations that serve populations with lower levels of behavioral health resources through education, partnership, technical assistance, and equity dialogue.[69] CDC's Center for Injury Prevention and Control partnered with the National Association of County and City Health Officials (NACCHO) to compile available literature from local, state, and national entities that addresses health equity in the national drug overdose response. The resources address three core areas: programs, practices, and interventions; planning and implementation; and outreach and awareness.[70] The National Institute on Alcohol Abuse and Alcoholism's (NIAAA) top research priority includes increasing the number of underrepresented individuals conducting research in order to improve understanding of patterns of alcohol consumption and consequences of alcohol use in various racial, ethnic, rural, and low socioeconomic groups; such research is key to developing effective interventions in these communities.[71]

2022 Recovery Research Summit Speaker Profile

Corrie Vilsaint, PhD

Research fellow in psychology at Harvard Medical School and associate director for recovery health equity at the Recovery Research Institute, understands the crucial role that data plays in both demonstrating the value and authenticating the outcomes of recovery programs. Vilsaint is a community psychologist and international speaker whose research focuses on racial health equity in remission and recovery, the reduction of recovery-related discrimination, the building of recovery capital, and the effectiveness of recovery support services. She served as a panel moderator at the 2022 Recovery Research Summit, facilitating discussion on the expansion of demonstration projects at the federal level, challenges in providing competent care to marginalized populations, and barriers to funding.

One issue that was frequently referenced as a barrier to recovery during the Recovery Research Summit is stigma.[72] George Koob, PhD, director of NIAAA, addressed the language used to characterize SUD and those in recovery as an important component in the organization's main principle to do no harm. "Dropping the use of words like 'drug abuse' and 'alcoholism' and 'addict' helps make discussions about recovery more person-oriented and less stigmatizing," he said, and research validates his position.[73] "Words matter and using less charged language can help create a more supportive and less discriminatory environment."

Stigma also affects access to and quality of medical care that people with SUD receive. A large body of research shows consistent hesitation among health care providers to work with people with substance use.[74] A Johns Hopkins Health System survey found, for example, that over half of physicians in emergency departments "had low regard for patients with substance use" and indicated that they at least "somewhat agree" that they "prefer not to work with patients with substance use who have pain." Such findings clearly illustrate barriers to general health care for SUD patients. They also represent a failure to maximize opportunities for early substance use identification and intervention with SUD patients, including in facilities that they are more likely to use, such as emergency departments.[75]

Several Summit participants discussed stigma as a by-product of discrimination. "During the past 25 years, there has been growing recognition that stigma and discrimination against substance use are actually making the whole issue much worse," said Volkow. For example, interventions through the criminal justice system can be an important source of treatment, as well as motivation for individuals with SUD to embark on the recovery journey. However, some aspects of the legal process such as long and often expensive probation periods and lifetime bans on professional licensing significantly impact the earning ability of people who have criminal convictions, serve as barriers to recovery that many are unable to overcome, and are a major source of stigma. "Criminalizing [SUD] or dealing with SUD by incarcerating people is one of the worst interventions," said Volkow. "If we want to help people achieve recovery, we need to succeed in getting rid of that discriminating perspective that we still hold as a society." People have recognized this reality for decades. Marty Mann, who started the National Committee for Education on Alcoholism (later called the National Council on Alcoholism and ultimately, the National Council on Alcoholism and Drug Dependence) in 1944, said, "One of the reasons I started the National Council and set out to educate people about addiction [sic] was that I had become convinced that the great majority of addicted persons [sic] ... would never get any help, would never have a chance to get well, because the stigma lay so heavily upon them they didn't dare go and seek help ... They didn't want anybody to know, and that still goes on today. I think it's awfully hard to let people know that you're addicted ... when you know exactly what they think that means. Even though what they think is not the case and isn't the truth ... they don't know that."[76]

2022 Recovery Research Summit Speaker Profile

Deidra Roach, MD

Understands the benefits of dedicated recovery service providers: "The treatment system cannot meet [all support needs] across the substance use disorder continuum alone." Her work exemplifies this mindset. In addition to being a medical project officer and a program director of treatment health services in the recovery branch at the National Institute on Alcohol Abuse and Alcoholism (NIAAA), Roach serves on the Interagency Coordinating Committee on Fetal Alcohol Spectrum Disorders (ICCFASD), the National Institutes of Health (NIH) Coordinating Committee for Research on Women's Health, and the NIH Inclusion Governance Committee. She also chairs the Women, Drinking, and Pregnancy Work Group of the ICCFASD. Roach's research focuses on alcohol and HIV/AIDS; alcohol use disorder (AUD) and co-occurring mental health disorders; harmful drinking among women; treatment of HIV/AIDS and harmful drinking; and fetal alcohol spectrum disorders. In addition to serving as a panel moderator for the 2022 Recovery Research Summit, she served on the summit's planning committee and helped to select the presenting researchers.

People who want to remove the barrier that stigma presents to recovery have reached a consensus. The National Treatment Plan was a meeting convened by SAMHSA in 1999. One of the first issues it addressed was stigma; the Plan's views on stigma are as accurate today as they were in 1999: "We envision a society where people who are addicted to alcohol or other drugs, people in recovery from addiction, and people at risk for addiction are valued and treated with dignity; and where stigma, accompanying attitudes, discrimination, and other barriers to recovery are eliminated. We envision a society where addiction is recognized as a public health issue—a treatable disease for which individuals should seek and receive treatment; and where treatment is recognized as a specialized field of expertise."[77]

Stigma is a form of discrimination directed at people addicted to, at risk for, or in recovery from dependence on alcohol and other drugs, and those associated with them. Often, the individuals who are stigmatized endorse stigmatizing attitudes and practices, turn them on themselves, and make them part of their self-image, which further inhibits their ability to seek treatment and maintain recovery. Blame and shame work together to heighten the effect of stigma; blame is directed at others and shame is internalized and directed at self; therefore, stigma strikes with a two-edged sword. The first blow is the disease itself, which is followed quite closely by the second blow, the stigma. The emotional impact of addiction stigma is sometimes as harmful as the direct effect of the disease itself. The stigma also causes institutional discrimination in the criminal legal system, juvenile justice system, education, employment, housing opportunities, health and health care, insurance coverage, and human services. Demographic variables related to stigma include race/ethnicity, gender, age, religion, SES, employment status, geography, disability, sexual orientation, education, position/profession, political affiliation, immigration or citizenship status, and criminal or legal status. Through stigma, each of these variables can affect where individuals start out or end up in society.

Something as pervasive and hateful as stigma is not easily changed. So, although it is not an easy course, change is achievable. As Dr. Martin Luther King, Jr. said, "...through education we seek to change attitudes; through legislation and court orders we seek to regulate behavior. Through education we seek to change internal feelings [prejudice, hate, etc.]; through legislation and court orders we seek to control the external effects to those feelings. Through education we seek to break down...spiritual barriers; through legislation and court orders we seek to break down physical barriers.... Through direct action [we seek] to create a situation so crisis-packed that it will inevitably open the door to negotiation. One method is not a substitute for the other, but a meaningful and necessary supplement. Anyone who starts out with the conviction that the road to... justice is only one lane wide will inevitably create a traffic jam and make the journey infinitely longer."[78]

2022 Recovery Research Summit Speaker Profile.

Dona Dmitrovic, MHS

Is a firm believer in the importance of federal support for "local, community-based organizations that are doing the work on the ground" and providing essential services for people in recovery. As the Substance Abuse and Mental Health Agency's (SAMHSA) senior advisor for recovery, Dmitrovic helps raise public awareness and supports development of substance use disorder (SUD) support programs. She was previously the executive director for the Foundation for Recovery in Las Vegas, where she developed and implemented peer support programs and oversaw training of peer service providers. At the 2022 Recovery Research Summit, she discussed the Certified Community Behavioral Health Clinic demonstration project, which was the foundation of a law establishing certification requirements for such clinics. Now, more than 450 certified clinics operate in 42 states, plus Guam, and one of their typical services is peer recovery support. She also spoke at length on government efforts to address stigma and discrimination toward people with SUD.

Chapter 3:

Growing Recovery Capital

External Resources: Health Care, Housing, Employment, Education, Transition Services

As former Secretary of State Hillary Rodham Clinton famously wrote, "It takes a village..." to accomplish positive change—a truism with particular relevance to recovery capital. At some point during their lifelong process, every person in substance use disorder (SUD) recovery requires support, especially in the early stages. Abstinence is a jolt to the system, and even more so for those whose substance use is deeply ingrained. The everyday drum beat of physiological, psychological, and behavioral triggers urges a return to predictable patterns and, in periods of stress, is even more difficult to resist. Access to people, processes, and resources that help people in SUD recovery cope with those triggers is essential. External recovery capital comprises non-clinical recovery support services that can include places to live, work, and attend school in which drugs and alcohol are unavailable, health care and medication management that improve well-being and build stamina, services that ease transitions from treatment, incarceration, or homelessness to a self-directed life, and structure and income provided by regular employment. These resources, which were discussed at length during the 2022 Recovery Research Summit, as well as other equally important external resources, are key elements of recovery capital. Their abundance or absence is a reliable predictor of sustained recovery.

Health Care

Chronic use of drugs outside of medical supervision increases the risk for a wide range of health conditions, both as a result of physiological effects of the drugs themselves and of behaviors related to the drug use.[79] Findings from a national recovery survey highlight a higher medical burden associated with substance use, including elevated prevalence of chronic obstructive pulmonary disease (COPD), heart disease, and diabetes.[80] Most recently, research has shown and the Centers for Disease Control and Prevention (CDC) has confirmed that having a SUD makes severe illness, hospitalization, and death from COVID-19 infection more likely.[81,82] People who engage in substance use or high-risk behaviors associated with substance use (unprotected sex, intravenous drug use with non-sterile syringes, etc.) are at risk for contracting other viral infections, such as human immunodeficiency virus (HIV) or hepatitis.[83] Substance use and the high-risk

2022 Recovery Research Summit Speaker Profile

Dave Sheridan, MBA

Was a charter Board Member and past President of the National Association of Recovery Residences (NARR) and currently serves as NARR's Executive Director. He is a an institutional investment manager who serves as Board Member and Treasurer of the Chandler Lodge Foundation in North Hollywood, CA and served for a decade on the board of Southern California's Sober Living Network. A national speaker and writer on recovery residence issues, Sheridan advocates for fair housing and for statewide systems for supporting quality recovery residences. At the 2022 Recovery Research Summit, he addressed the importance of safe and supportive housing – a key element of recovery capital for people who need places to live that support their recovery journey from substance use disorder (SUD).

behaviors often associated with it increase incidence of accidents, violence, and other types of injury.

Further, treatment for SUD was, until about 15 years ago, largely segregated from mainstream health care and traditionally has not been part of routine medical screening. That segregated approach has created impediments to the types and quality of care for patients in both traditional health care and substance use treatment systems.[84] Despite increased treatment and the availability of SUD recovery services, which were mandated by the federal Mental Health Parity and Addiction Equity Act (2008) and the Affordable Care Act (2010), barriers for SUD patients trying to access these services persist. At the same time, this population has lower rates of treatment completion and poorer outcomes across a broad spectrum of treatment for other medical conditions. A systematic review of 10 studies that examined the quality of medical care in people with and without mental illness or SUD suggested inferior quality of care in at least one domain for those with SUD.[85] Multiple studies show greater gaps in access to medical care for people with SUD who are also members of a population that has a history of discrimination—people in minority racial, ethnic, or religious groups, women, those with lower income and wealth, people with disabilities, sexual and gender minorities, immigrants, people with language barriers or low health literacy, and others who are stigmatized or underserved.[86,87] The American College of Physicians (ACP), which has long advocated for universal access to high-quality health care in the United States, has called for ending discrimination in medical care based on personal characteristics, reducing nonfinancial barriers to care, and improving social determinants of health in order to achieve a better U.S. health care system for all.[88]

Segregation of medical treatment and treatment for SUD and mental health issues also affects overall quality of care for all patients. Failure to screen patients for substance use or misuse, beginning in adolescence, is a byproduct of treatment segregation; it represents a failure to engage with patients and where appropriate, family members or caregivers,[89] to interrupt the potential progression from use to misuse to disorder. It is also detrimental to provider understanding of important factors like drug and alcohol use that affect their patients' fundamental health and wellness. Greater integration of treatment for SUD and primary health care, as well as additional research to explore complex relationships between substance use and disease, are urgently needed to improve medical care across populations and to reduce inequities in health care outcomes for people with SUD.[90]

2022 Recovery Research Summit Speaker Profile

Rahul Gupta, MD, MPH, MBA, FACP

Is the first medical doctor to serve as the director of the Office of National Drug Control Policy (ONDCP), a component of the Executive Office of the President. ONDCP coordinates the nation's $40 billion drug budget and federal policies, including prevention, harm reduction, treatment, recovery support, and supply reduction. A board-certified internist, Gupta has been a practicing primary care physician for more than 25 years. During the 2022 Recovery Research Summit, he detailed ONDCP's commitment to creating and sustaining a recovery-ready nation, including increasing the evidence base related to substance use disorder (SUD) recovery: "There's so much more research to be done, especially when it comes to our understanding of recovery and how federal, state, and local policies could help people maintain recovery." As Gupta emphasized at the summit, a top priority in the National Drug Control Strategy is recovery support research and services.

Housing

Recovery housing is the most widely available resource in the recovery capital infrastructure.[91] Substance-free step-down housing immediately following inpatient substance use treatment and similar living environments that provide peer support for individuals in outpatient or community-level treatment have become a fixture in the recovery space. As a result, there is a growing evidence base on the efficacy of recovery residences, much of which indicates that these environments are associated with positive outcomes, including abstinence, employment, and decreased involvement in the criminal justice system.[92] Many people in recovery require a living environment free of alcohol and drugs to achieve remission and at the same time, lack a living environment that supports recovery. Recovery residences generally include formal services such as recovery groups, case management, and individual counseling. However, the shift of SUD treatment to outpatient services within the community in the 1970s led to the development of independent housing that most often applies principles from Alcoholics Anonymous (AA) to community-led recovery. Today's recovery residence is often unlicensed, typically requires residents who need treatment to obtain licensed professional services outside of the home environment, and may be governed only by local zoning and safety codes. Residents are expected to both give and receive help, and the basis of authority is the lived experience of recovery rather than expert knowledge.[93]

A 5-year-long project in Oregon funded by the National Institute on Drug Abuse (NIDA), called the Initiative for Justice and Emerging Adult Populations (JEAP),[94] conducts preliminary research on a wide range of recovery support services, including recovery residences. Its initiatives began in 2021 and focus on two groups of people with a high risk for problems related to opioid use disorder: (1) emerging adults ages 16–25, and (2) individuals with SUD who are involved with criminal justice and legal systems. Ashli Sheidow, PhD, directs the program; during the 2022 Recovery Research Summit, she said this about JEAP: "We are focusing on building more research on recovery, including housing support specifically, because while we're seeing studies that suggest substance-free housing might benefit high-risk groups like the two that make up our target audiences, more research that is scientifically rigorous is still needed to help policymakers develop standards of care and to help the facilities identify and implement best practices."

2022 Recovery Research Summit Speaker Profile

George F. Koob, PhD

An internationally recognized expert on alcohol and stress and the neurobiology of addiction, seeks to understand and promote strategies and tools that "[reduce] all the bad guys in your brain and [bring] out all the good guys." Director of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), he helps lead the national effort to reduce the public health burden associated with alcohol misuse. His research on the function of emotion and stress related to alcohol and drug addiction has significantly broadened understanding of the physiological effects of alcohol and other substance use. At the 2022 Recovery Research Summit, he discussed the importance of screening and intervention for substance use in emergency room settings, the value of social supports such as Alcoholics Anonymous (AA), and strategies to help reduce stigma in research on substance use and recovery.

Focus groups of recovery housing managers and residents have found that while entry into recovery housing is often motivated by outside forces—pressure from family members, legal mandates resulting from engagement with criminal justice systems, and disruption in housing and employment as a result of SUD—the importance of the social environment within the recovery housing can become a significant motivator for abstinence. Peer support and camaraderie engage residents in unique ways and reinforce their desire to leave old

friends, places, and patterns behind and build relationships with like-minded peers and mentors. These relationships foster beneficial confrontation and positive peer pressure that also contribute to sustained recovery.[95]

2022 Recovery Research Summit Speaker Profile

Grant Baldwin, PhD, MPH

Has a fundamental belief that a recovery-ready nation is not only possible but will be achieved through, as he explains, "persistence and... unwillingness to accept anything less." This belief drives his work as the director of the division of overdose prevention at the Centers for Disease Control's (CDC) National Center for Injury Prevention and Control. He is responsible for monitoring trends in the opioid epidemic and other emerging drug threats as well as identifying and scaling up prevention activities to address the evolving drug crisis. This work includes supporting local drug-free community coalitions. His contributions to the 2022 Recovery Research Summit included discussion of efficient funding allocation to ensure equitable application of evidence-based research, as well as the types of programs CDC is employing to support recovery and recovery research both alone and across government agencies.

Two of the action steps in the National Drug Control Strategy (NDCS, known as "the Strategy") to make recovery possible for more Americans are to foster the adoption of more consistent recovery housing standards and to expand and sustain funding for recovery housing. Operational standards would help ensure better quality recovery housing across states, help prevent exploitation of residents and funding organizations, and help consumers, employees, and payers identify quality recovery residences. To that end, the Substance Abuse and Mental Health Services Administration (SAMHSA) and the U.S. Department of Housing and Urban Development (HUD) "should co-lead efforts to promote adoption of nationally recognized recovery residence standards, engaging stakeholders such as National Alliance for Recovery Residences (NARR), Oxford House, NASADAD [National Association of State Alcohol and Drug Abuse Directors], the National Conference of State Legislatures (NCSL), the National Governors' Association (NGA), the National Association of Counties (NACO), and the ONDCP [Office of National Drug Control Policy] Model State Drug Law grantee, Legislative Analysis and Public Policy Association (LAPPA), which convened a consultative process through which a Model State Recovery Residence Certification Act was developed in 2021."[96] Regarding funding, the Strategy acknowledges the need for sustainable financing streams for recovery housing, with approaches that "complement self-pay funding models under which residents seek and obtain employment and pay for their room and board but may also need to accommodate models that serve individuals with greater levels of impairment who may require support for a longer period of time." Robust research into the efficacy of various models of recovery housing is essential to the development of standards that can address legal, regulatory, and policy concerns and barriers that affect access to recovery housing.

Employment

Additional action steps in the Strategy seek to reduce legal, regulatory, policy, and practice norms that hinder employment by people in recovery from SUD, expand employment opportunities for them, and promote recovery-ready workplace policies that encourage successful employment. Although the ability to secure and hold a job is associated with both improved outcomes for the individual and public safety outcomes for the community, a history of substance use or substance-

2022 Recovery Research Summit Speaker Profile

Jalie A. Tucker, PhD, MPH

Is the director of the Center for Behavioral Economic Health Research at the University of Florida College of Health and Human Performance. To Tucker, the action step in public health is finding people in their communities and connecting them to the services they want and need to support their recovery. Her recent work informs risk reduction strategies with underserved problem drinkers attempting natural recovery and with disadvantaged emerging adults. She has contributed to more than 135 publications and four books, including Dynamic Pathways to Recovery from Alcohol Use Disorder: Meaning and Methods. At the 2022 Recovery Research Summit, she discussed natural recovery, the continuum of recovery care, and the effective use of technology to reach people in recovery.

related criminal charges can present nearly insurmountable barriers to meaningful employment. Collateral consequences of conviction comprise federal, state, or municipal add-on penalties that go above and beyond a sentence. These can include ineligibility for obtaining or retaining professional licenses, even in fields unrelated to the criminal charge, inability to work in state government or the health care field, bans on access to public housing, assistance, or student aid, and other penalties where there is no nexus between the restriction and a harm to be prevented (e.g., denying commercial driver licenses for a certain period after a conviction for driving while impaired). The U.S. Commission on Civil Rights (USCCR) noted that when these collateral consequences are broadly applied and do not serve a legitimate public safety function, they undermine public safety by preventing community reintegration.[97]

Supported employment is a direct service with multiple components to help adults with mental disorders or co-occurring mental and substance use disorders choose, obtain, and retain competitive employment, especially in jobs that are held by consumers directly and not reserved for individuals with disabilities or held by a provider agency. Supported employment can also provide ongoing assistance from mental health or substance use professionals. A SAMHSA-sponsored literature review of the evidence on supported employment that emphasized rapid job search rather than lengthy pre-employment assessment, training, and counseling, found a high level of research evidence consistently demonstrating positive outcomes, such as higher rates of employment, fewer days to the first competitive job, more hours and weeks worked, and higher wages. Several systematic reviews that averaged rates across studies found that the mean competitive employment rate was between 58% and 60% for those receiving supported employment, compared with 23% to 24% for control conditions.[98] SAMHSA has also awarded grants under its Transforming Lives Through Supported Employment program[99] to enhance state and community capacity to provide and expand supported employment programs.

Workplace policies and the presence of stigma in the workplace can also affect the ability of people in SUD recovery to obtain and retain meaningful employment. Both the federal government and a growing number of states are developing programs and initiatives that encourage the hiring of people in recovery. Other initiatives that are increasing across the country help employers adopt policies and encourage workplace cultures that support recovery in addition to preventing substance use on the job. Dedicated research on the net impact that meaningful employment obstacles have on SUD recovery, as well as the impact that obstacle reduction initiatives have, is urgently needed. This is especially important in light of the wide-ranging and significant changes in the American work environment brought about by the COVID-19 pandemic. Chapter 6 of this report summarizes the results of the 2022 Workplace Recovery Survey, which examined beliefs, attitudes, knowledge, policies, and culture affecting

recovery readiness in the workplace, as well as other relevant research on employment and recovery. Fors Marsh, LLC conducted the survey to kick off a 5-year commitment for company-funded recovery research related to the workplace.[100]

Education

According to 2019 data from the National Center for Drug Abuse Statistics (NCDAS), over one in five 8th-grade adolescents say they have tried illicit drugs at least once, and nearly one in ten 12- to 17-year-old adolescents report prior-month drug use. By the time they're in 12th grade, nearly half of teens say they have tried illicit drugs. Over one in 10 drug poisoning deaths are in teens and young adults ages 15 to 24.[101] Incidence of SUD increases steadily after age 12, peaking among those ages 18 to 23. For teens and young adults, SUD is often a chronic condition with multiple treatment episodes and varying levels of recovery support following treatment.[102] Drug use can disrupt normal brain development during adolescence and can increase risks for mood disorders and SUD later in life, in addition to contributing to higher dropout rates and lower academic achievement.[103]

Despite the magnitude of adolescent substance use spotlighted by these statistics, nearly all substance use services targeting youth are either for prevention or treatment. Recovery high schools are a notable exception. These schools offer standard educational curricula that comply with state and local requirements; they also provide therapeutic programs to support unique needs of youth in recovery from SUD. Although therapeutic services lack standardization across the country, many include daily group check-ins, peer support, individual or group counseling sessions, and community service requirements. Enrollment is typically voluntary, and most recovery high schools do not require previous completion of SUD treatment; instead, students are expected to commit to abstinence and recovery during enrollment.[104]

Similarly, collegiate recovery communities or programs are a system-level intervention that offers resources for students to initiate or sustain their recovery in a safe environment and to complete college. Collegiate recovery programs offer a variety of recovery support efforts and engage clinicians and other health care providers to deliver services and manage activities, such as sessions with peer recovery coaches and mentors, continuing-care programs, and mutual-help groups. As is true for recovery high schools, collegiate recovery programs primarily operate independently, with wide ranges of funding support, different levels of institutional support from host universities, and little or no standardization across states or regions.[105]

2022 Recovery Research Summit Speaker Profile

John Kelly, PhD

A professor of psychiatry at Harvard Medical School, specializes in linking known physical and psychological stress responses to stages of behavior change for people in recovery. His work has helped identify high-vulnerability windows in the recovery spectrum and how factors such as recovery capital either help or hinder passage through those windows. At the 2022 Recovery Research Summit, he likened recovery to the aftermath of a burning building: "Once we've put out the fire, surveyed the damage, and started cleaning up, we must also limit opportunities for addiction to reignite." Kelly is the founder and director of the Recovery Research Institute at Massachusetts General Hospital, where he is the associate director of the Center for Addiction Medicine. At the Summit, he also presented on topics including supporting and expanding recovery capital and the physiological and psychosocial changes that are an intrinsic part of the recovery process.

2022 Recovery Research Summit Speaker Profile

Julie Wernau

Is a health and medicine reporter for The Wall Street Journal. Her stories illustrate the practical impact that health policy has on individuals, families, and communities, often with a focus on the opioid epidemic, COVID-19, and abortion. Her work on predatory lending for the New London Day won her a Thomas K. Brindley Award for Public Service and she was a Livingston Award finalist while on The Chicago Tribune's business desk. Speaking at the 2022 Recovery Research Summit, she said of substance use disorder (SUD) recovery: "There's a massive opportunity still ahead of us... a bright spot. Focusing on recovery involves explaining science and medicine and... things that are working and that are news because they're working better than they have in the past—or they're working for the first time. And so the more that we can find those stories about what's new and different in recovery, the more we—as journalists—will be able to tell them."

It should come as no surprise, then, that research on and evaluation of both recovery high schools and collegiate recovery programs is spotty and inconclusive. A 2018 literature review found no conclusive evidence that either recovery high schools or college recovery programs improved student abstinence or graduation rates when compared to other schooling. There also was no conclusive evidence that attending these institutions reduced delinquency any more than attending a non-recovery education program did.[106] Subsequent research has suggested benefits to the recovery education model but is not yet conclusive. An oft-cited 2019 study suggested that recovery high schools did improve abstinence and thereby created positive financial benefits for school systems and communities, but it was based on a small number of participants.[107] In 2020, researchers suggested that recovery high schools might benefit some adolescents in recovery and that they should continue to be explored as a recovery support tool. However, the researchers also noted that the schools were highly heterogenous in terms of services offered, and that additional screening and programming were needed to expand their benefits to as many adolescents as possible.[108]

Collegiate recovery program efficacy also remains poorly demonstrated, which researchers attribute to a lack of standardized tools to evaluate program outcomes. Recent writing on college recovery communities strives to provide these tools and create models of function for collegiate recovery communities, but again, it does not specifically demonstrate success.[109] Small surveys and assessments of specific college recovery programs suggest some level of benefit to participants—but rigorous research based on standardized measurements of overall programs, as well as specific interventions and program elements, operation, and protocol, is yet to be published.

Transition Services: Incarceration to Community

According to the Strategy, an estimated 65% of the people imprisoned in the United States today have SUD. Individuals committing drug-related offenses are serving longer sentences than before, despite compelling evidence that more time in prison does not reduce drug use or drug arrests. When incarcerated people with SUD return to their communities, they face additional challenges, including higher risk of overdose and barriers to connecting with treatment and recovery services providers. The Strategy calls for five basic resources to be provided to all incarcerated people prior to their release: state-issued identification, Medicaid if available, bridge prescriptions or take-home

supplies of medications for opioid use disorder, an appointment with a community provider or case worker, and a handoff of treatment records to providers. Recovery community organizations (RCO) are key providers of recovery support services for people who were recently released from jail or prison. For example, peer workers in these organizations can serve as a bridge between formal systems such as SUD treatment, health care, child welfare, or criminal justice systems, and community-based resources such as family, mutual aid groups, housing, employment, faith groups, and the broader recovery community.

2022 Recovery Research Summit Speaker Profile

Kristina Canfield, MEd

Executive director for the Association of Recovery in Higher Education (ARHE), has been part of the collegiate recovery field for the past 12 years. Her work is informed by her lived experience as a person who first found recovery as a college student, and as she explains, helps to demonstrate "what happens when we stop using punitive measures on college campuses and... start actually supporting help-seeking behavior." Canfield attended Ohio University in Athens, Ohio, where she earned both a bachelor's degree in history and a master's degree in college student personnel. During her time there, she helped establish the Collegiate Recovery Community to assist students on campus who were in or were seeking recovery from substance use disorder (SUD).

The Strategy also calls for elimination of collateral consequences for all former offenders, such as ineligibility to obtain or retain a professional license, a ban from public housing, assistance, or federal student aid, and ineligibility for employment within health care facilities or state governments. These collateral consequences, many of which are lifelong, significantly limit the ability for successful reentry into the community and for employment. It is no surprise that about 60% of individuals reentering society remain unemployed a full year after incarceration—a condition that encourages both recidivism and relapse.[110]

Many states and nonprofit organizations operate transition programs to help former offenders succeed in the community; services range from classes on technology, to SUD recovery support, to job training and business clothes for job interviews. However, evaluation of either SUD-specific transition programs or specific elements that are designed to support substance use recovery within transition programs is not as expansive as is needed to help funding and service organizations develop best practices to improve program efficacy. One systematic review of the effectiveness of community reentry programs to reduce recidivism and assist in the successful transition of incarcerated people into the community found that the post-release period is characterized by poor continuity of care, inadequate social support, and limited financial resources. Incarcerated people with a history of SUD are particularly vulnerable, with higher rates of morbidity, mortality, and return to custody in the 6 months post-release. The review suggested that access to social support and housing, interpersonal skills of case workers, and continuity of case worker relationships through pre-release and post-release periods are key structural factors in program success. Housing and employment were identified as the most crucial forms of recovery capital for people in jail or prison who have SUD: progression through the recovery process was contingent on finding employment, and obtaining housing and increasing independence were seen as markers of reentry success. However, as is typical of much research on this issue, the studies examined in the review all had small sample sizes, did not establish causality of either success or failure, and produced findings that may not translate broadly because of differences in prison systems and post-release services provided.[111] Given that nearly two million people are currently being held in state and federal prisons, local jails, juvenile correction facilities, immigration detention facilities, Indian country jails, military prisons, civil commitment centers,

state psychiatric hospitals, and prisons in U.S. territories, the need for a comprehensive evidence base for successful transition services to help individuals with SUD being released back into the community is urgent.[112]

Chapter 4:

Building Recovery Capital

External Resources: Mutual Help, Peer Support and Community Services

In 1935, Dr. Robert Smith, a physician and surgeon in Akron, Ohio, met Bill Wilson (Bill W). Smith, who had struggled his entire adult life with a profound alcohol use disorder (AUD), had attended meetings for 2 years at the local chapter of the Oxford Group, a nationwide non-denominational Christian movement whose members sought to solve problems and improve their lives by accepting their frailties and putting themselves in the hands of God for daily guidance and inspiration. Although the meetings had an enormous influence on him, they were not enough to enable Dr. Bob, as he became known, to achieve recovery. Bill W had also lived with AUD throughout his adulthood. He had joined a New York chapter of the Oxford Group after a drinking binge led to his hospitalization and for 6 months, he and a friend had been sharing with other people with AUD the spiritual process that had enabled them to attain and sustain recovery. Although he had found the support he needed to sustain abstinence by sharing his experiences, he found himself craving alcohol again on a business trip in Akron. He called several churches in search of someone else who had AUD and met with Dr. Bob. Bill W described his life with an alcoholic condition, the spiritual process that transformed him, and his life as it unfolded in recovery. The two men agreed to work together to share their experiences with others still experiencing active AUD. They founded Alcoholics Anonymous (AA) and developed the structure of 12-step programs—using many of the principles of the Oxford Group—that are now ubiquitous in treatment and recovery from substance use disorder (SUD).

People participating in 12-step programs follow a consecutive set of abstinence-based requirements that have been distilled

2022 Recovery Research Summit Speaker Profile

Mary Hyde, PhD

Director of research and evaluation at AmeriCorps, recognizes the crucial need for collaboration at all levels of government to reach communities in need—particularly those that are underserved, marginalized, or under-resourced. Hyde has directed both national and local program evaluations of community- and school-based initiatives and systems designed to prevent delinquency and school drop outs and promote social and academic success among urban youth. She previously worked in the private sector and was responsible for a portfolio of projects related to strengthening families and communities. She spoke at the 2022 Recovery Research Summit about AmeriCorps contributions to executing evidence-based policies in more communities, the value of lived experience in reducing stigma, and how AmeriCorps helps strengthen and rebuild state, local, and federal partnerships that are essential to funding recovery efforts.

down to six priorities: don't drink or use drugs; go to meetings; ask for help; get a sponsor; join a group; and to get it, you must give it away, or be active in your own and others' recovery. Today's 12-step programs remain an integral element in the recovery process for millions of people worldwide who live with SUD, abnormal responses to food intake, gambling disorder, and other compulsive behaviors, including sex, consumption of pornography, and computer gaming. These self-help/mutual help programs are widely available, easy to access, and free. For many people, they serve as the primary source of information, education, and inspiration for behavior change; for some, they take the place of formal treatment or serve as the only form of continuing support used to expand their recovery and build upon gains made in treatment.

An enormous volume of research points to the efficacy of early 12-step program participation in ushering in recovery, improving SUD outcomes, and reducing health care costs. Findings from studies over the last two decades support the hypothesis that any 12-step engagement appears to decrease subsequent alcohol and drug use and increasing engagement is directly related to reduced use. Even though participation is often inconsistent and attrition rates are relatively high, the median length of abstinence reported by AA and Narcotics Anonymous (NA) members is more than 5 years, suggesting that longer-term abstinence is sustainable among those who regularly attend meetings. In fact, there is a well-known adage that states, "you go to meetings until you want to go to meetings," thus, you continue to go to meetings. Studies show that in addition to supporting longer periods of abstinence, 12-step participation improved psychosocial functioning and greater levels of self-efficacy.[113]

A major factor in the success of 12-step programs is the social network they provide. The relationships that develop with like-minded peers support abstinence and provide role models for behavioral norms that decrease exposure to triggers for substance use. Engagement in rewarding abstinent activities, a larger network of people who support abstinence, bonding with those who have similar challenges and goals, and greater social self-efficacy come with regular interaction among program participants. This shift in individual social networks and common behavior change processes appears to contribute more to the benefits of these mutual support groups than do specific steps or spiritual elements of 12-step programs.[114] During the Recovery Research Summit, Christine Timko, PhD, research career scientist with the Department of Veterans Affairs (VA) and a consulting professor at Stanford University, addressed the similarity between these kinds of programs and treatment: "There's a lot of commonality in the active ingredients of evidence-based 12-step facilitation practices, or mutual help groups more generally, and treatment settings. They both provide bonding with others, some goals and direction, [and] some structure. They help build self-efficacy and coping skills. So, across a lot of different kinds of mutual

2022 Recovery Research Summit Speaker Profile

Miriam E. Delphin-Rittmon, PhD

Is the assistant secretary for mental health and substance use and the administrator of the Substance Abuse and Mental Health Services Agency (SAMHSA). Her agency defines recovery as "a process of change through which individuals improve their health and wellness, live self-directed lives, and strive to reach their full potential." Throughout her 20-year career in behavioral health, she has been deeply involved in the design, evaluation, and administration of mental health, substance use, and prevention services and systems and has received numerous awards for advancing policy in these areas. At the 2022 Recovery Research Summit, she emphasized the importance of recognizing multiple pathways to recovery, the need for more research into actions that might support recovery through those pathways, and the effectiveness of recovery support at the community level.

help resources, there are many common elements to help people on the road to recovery." In fact, many treatment programs in the United States use 12-step facilitated methods as the basis of their programming; this approach prepares individuals to engage in familiar support provided by the networks of others long after they have completed the programs.

Peer-to-Peer and Community-Based Recovery Support Services

The value of interactions with and support from individuals who have a lived experience in addiction and recovery extends far beyond 12-step programs. Especially in early stages of recovery, non-clinical services provided by individuals trained in recovery support can help those with SUD to navigate their new circumstances and environments, including treatment, health care, and legal and criminal justice systems. Peer support workers can reach people with SUD in diverse settings such as emergency departments, inpatient treatment centers, primary care practices, mobile clinics, drug court and diversion programs, and street/community outreach programs. During the Summit, Ashli Sheidow, PhD, science director for the Oregon Social Learning Center, discussed the importance of peer support for young adults in recovery: "Young adults do not always want treatment, but we've found that by adapting multisystemic therapy and helping them to determine what their priorities are for recovery, we can use those priorities to guide treatment. Those priorities are usually things like jobs, having access to money, and relationships. That doesn't sound like treatment, and peer supports don't usually feel or sound like treatment. Peer support workers can get their foot in the door where counselors often can't. What many of them really do is linkage facilitation—helping people transition from the kinds of support and stabilization they got during treatment to the resources they need and want throughout recovery."

2022 Recovery Research Summit Speaker Profile

Nora Volkow, MD

Understands the importance of meaningful social support systems for people who are in recovery: "You have to give them health, you have to give them a home, you have to give them a profession, and you have to give them a mission—and those factors are fundamental." As the director of the National Institute on Drug Abuse (NIDA), Volkow has been instrumental in changing the conversation about addiction so that it is now commonly acknowledged as a brain disorder. In particular, her studies have documented changes in the dopamine system triggered by substance use and how they affect the functions of frontal brain regions involved with reward and self-control. She spoke at the 2022 Recovery Research Summit about NIDA's Recovery Research Network, a hub to gather insights on models of care from researchers all over the United States. NIDA hopes to use the research network to build data that will inform policy and help guide best models of care for people in the recovery space.

The National Drug Control Strategy (NDCS, known as "the Strategy") advocates peer-led organizations such as recovery community organizations (RCO) as a method of service delivery to people in recovery. RCO peer support is advantageous because it can serve people who are not in or have not received treatment and who are not patients of a specific treatment provider. RCOs are also not subject to reimbursement limitations but can serve as a bridge between formal interventions such as those provided by treatment and criminal justice systems, and community-based resources like family, mutual aid groups, self-help groups, faith groups, and the broader recovery community. RCOs also lead policy, education, and outreach programs and often operate recovery community centers (RCC), peer service hubs that provide broad recovery support in addition to coaching, relapse prevention, social and recreational

activities, employment and housing support, and other services on a drop-in basis. Evidence shows that the kind of extended engagement available with RCCs is associated with greater recovery duration and improved psychological well-being and quality of life by people who use RCC services to build recovery capital. Studies also find that recovery coaching can be effective in helping people with SUD by improving relationships with providers, increasing treatment use and retention, and reducing relapse rates. A priority in the Strategy is to expand the capacity of peer recovery support services and foster the adoption of more consistent standards for the peer workforce, RCCs, RCOs, and similar peer-led organizations. The Substance Abuse and Mental Health Services Administration (SAMHSA) operates the National Peer-Run Training and Technical Assistance Center for Addiction Recovery Peer Support that helps states, organizations, and peer recovery support workers adopt more consistent standards nationally. These standards can improve quality, enable reciprocity of credentials from one jurisdiction to another, and facilitate funding from public and private insurers.

A significant issue affecting availability of peer recovery support services is funding—a frequent challenge discussed during the Summit. Much of the extant funding for peer support is attached to treatment and as Dr. Sheidow pointed out, "It's the post-episode of care where we see a huge gap in services to help people maintain their recovery. That's where peer recovery supports could be a huge help, but our system just isn't well set up to have those supports available and to have them funded. I'd love to see how we could fund the full continuum of care." The Strategy identifies sustainable financing for peer recovery support services as an indispensable element for creating a recovery-ready nation and describes block grant set-aside funds and Medicaid as playing a role in funding these services.[115]

Faith-Based Support

Driven in part by the impact of the opioid epidemic, especially in rural areas, faith communities have started to play a larger role in SUD treatment and more recently, in supporting SUD recovery. Faith-based treatment programs often partner with or recommend regular attendance and participation in religious activities after treatment. Many houses of worship host recovery activities such as AA and NA meetings, and larger religious centers sometimes employ faith workers who are also trained to support recovery from SUD. Nationally, multiple organizations exist to provide policy advice, toolkits and communications resources, education and training, and other assistance to religious organizations seeking to establish or enhance recovery services. For example, the Center of Addiction & Faith is a cross-cultural, interfaith network supported by faith communities as well as mental health and addiction experts. As explained in their

2022 Recovery Research Summit Speaker Profile

Patty McCarthy, MS

CEO of Faces & Voices of Recovery since 2015, knows firsthand that the creation of a recovery-ready nation requires building a recovery support infrastructure encompassing community organizations, recovery housing, recovery in high school and college, alternative peer groups, and others. A significant part of her work focuses on infrastructure. She was previously a senior associate with the Center for Social Innovation, where she served as a deputy director of the SAMHSA Bringing Recovery Supports to Scale Technical Assistance Center Strategy (BRSS TACS) initiative. McCarthy also served for a decade as the director of Friends of Recovery-Vermont (FOR-VT), conducting training, advocacy, and public awareness activities. She was instrumental in the development of national standards for peer recovery support service providers. She spoke at the 2022 Recovery Research Summit about the involvement of Faces & Voices in building a recovery-ready nation, as well as the resources needed to achieve that goal.

mission statement, they work to "awaken faith communities to be more fully places of welcome and healing for persons with addiction and those who love them." Like many faith-based recovery organizations, the Center of Addiction & Faith teaches addiction as a science rather than a moral issue, stresses treatment over punishment, and seeks to destigmatize language related to SUD and those who have it. The Center of Addiction & Faith has also sponsored the Addiction & Faith Conference: Awakening Faith Communities to Address Addiction.[116]

2022 Recovery Research Summit Speaker Profile

Peter Gaumond, MA

Believes that recovery is the glue that ties everything together. Like prevention, it builds resilience; like treatment, it equips people with tools they need to recover from substance use disorder. And in the end, it is the space in which those who have recovered from substance use disorder (SUD) will spend the rest of their lives. As the chief of the Recovery Branch for the Office of National Drug Control Strategy (ONDCP) and as a senior policy analyst supporting the ONDCP Office of Public Health, he provides expertise on policy and regulatory issues related to SUD recovery and support services. Gaumond has been instrumental in framing the federal government's approach to improving long-term recovery outcomes, assisting in the development of national policy goals and objectives, and creating and implementing plans to achieve them. As a person in long-term recovery, he works to raise awareness of addiction and recovery and to reduce the stigma that contributes to the social exclusion of people with SUD. At the 2022 Recovery Research Summit, Gaumond spoke of evidence-based harm reduction and treatment, recovery as a dynamic process rather than a static state, and national drug control strategy in the recovery domain.

Faith communities can access a wide range of support from federal and state sources. Among the resources related to SUD that the U.S. Department of Health and Human Services (HHS) Office of Intergovernmental and External Affairs Partnership Center offers are: "Faith and Community Roadmap to Recovery Support" and English and Spanish versions of "Practical Toolkit for Preventing Overdose and Supporting Recovery in Community Settings," as well as "Compassion in Action: A Guide for Faith Communities Serving People Experiencing Mental Illness and Their Caregivers."[117] The White House's Office of National Drug Control Policy (ONDCP) has organized a series of workshops for rural faith leaders to share information and resources for supporting individuals with SUD.

Objectives of the workshops include:[118]

- Increasing faith leaders' understanding of SUD and how to connect faith to prevention, treatment, and recovery;
- Building capacity of faith leaders to act by providing information that prepares and readies leaders and their congregants to support individuals with SUD; and
- Helping faith leaders to find their lane and empower faith communities to put initiatives in place that help in the area(s) where they can make the most difference.

Past workshops included "Substance Use Disorder and the Pandemic in Rural Communities" and "Connecting Faith to Prevention." Future workshops include "Understanding Treatment and Connecting Faith to Treatment" and "Supporting Recovery and Connecting Faith to Recovery." Among the regional Addiction Technology Transfer Centers (ATTC) funded by SAMHSA is the

Southeast ATTC (SATTC) housed at Morehouse School of Medicine's National Center for Primary Care. As stated in their mission, SATTC "...continues to accelerate the adoption and implementation of evidence-based and promising addiction treatment and recovery-oriented practices" and "strives to be the premier leading expert on faith-based communities" as part of SUD recovery. SATTC features webinars and printed materials, provides technical assistance and training, and co-sponsors the Annual Inter-Faith Institute on Recovery.[119]

On a state level, the North Carolina Council of Churches' Partners in Health and Wholeness program works for a more compassionate response to the opioid epidemic, and by extension, other forms of substance use. The program encourages understanding of harm reduction and the benefits of having faith communities and people of faith "as compassionate allies for people who use drugs." The program provides faith leaders and communities with information, resources, sharing opportunities, and as they state, "...the means to dispel the myths about the opioid crisis. With accurate information, we can all work toward compassionate rather than coercive responses, restorative rather than retributive responses."[120] Similarly, the Oklahoma Conference of Churches, in partnership with the Oklahoma Department of Mental Health and Substance Abuse Services, started an extensive program of outreach education and awareness to equip churches and faith communities with information they needed to understand the opioid epidemic, how it affects communities within the state, and how faith communities can support recovery from SUD, starting with important conversations about opioids. The program created a virtual on-demand opioid Summit for communities of faith, including information about grant opportunities to start a ministry to support substance use prevention, treatment, and recovery.[121]

Secular Support Programs

While increasing numbers of faith communities are creating or participating in substance use recovery support, secular support programs are also thriving. Many secular programs stress self-empowerment and credit individuals for achieving and maintaining their own recovery. One such program is Self-Management and Recovery Training (SMART). SMART is "a transformative method of moving from addictive substances and negative behaviors to a life of positive self-regard and willingness to change." The program teaches practical tools that encourage lasting change and includes peers and professionals to help people in recovery build and sustain healthy and balanced lives. It includes free mutual support meetings, a no-cost handbook of tools and exercises, and access to podcasts, how-to videos, and other free resources. SMART also fields specialty programs for family and friends, veterans and first responders, youth and teens, and treatment professionals. It also has a resource library specifically for officers of the courts and corrections facilities.[122] LifeRing Secular

2022 Recovery Research Summit Speaker Profile

Rich Collins, JD

Is a partner with the law firm of Arnall Golden Gregory in Washington, D.C. As a trial lawyer, he has devoted his practice in civil litigation to ensuring that people have affordable, accessible, and equitable health care. The majority of his work has focused in the field of behavioral health and substance use. At the 2022 Recovery Research Summit, Collins spoke of the stigma against people with substance use disorder (SUD): "From an institutional standpoint, when you're talking about payers or private health insurance companies, substance use disorder is where I've seen the most bias and prejudice. They are in the legal system itself, whether you're trying to convince a judge or potential jurors to set those biases and prejudices aside."

Recovery is an abstinence-based, anonymous, nonprofit organization that lets those with SUD experience non-judgmental recovery conversations with their peers. The program is based on the three-S philosophy of sobriety, secularity, and self-help. The organization is fully run by volunteers and members are asked to donate resources or time as they are able. Guidebooks are available at the LifeRing Secular Recovery bookstore. Individuals with 6 months of abstinence can start a new LifeRing Secular Recovery meeting in their communities.[123] Women for Sobriety (WFS), one of the oldest abstinence mutual-help alternatives to AA, supports personal empowerment and is designed to encourage positive thinking, self-esteem, and emotional and spiritual growth. Meetings are peer-led and several treatment and recovery centers across the United States host WFS meetings led by treatment staff. Research shows that outcomes for these programs are generally equivalent to those for the more traditional AA and NA programs, with lower levels of in-person meeting attendance but equivalent activity involvement and higher levels of satisfaction and cohesion.[124]

On a more limited basis, mutual help programs like AA and NA have been culturally adapted to appeal to specific groups, many of whom are less likely to participate in 12-step programs that cater to general populations. For example, the Medicine Wheel and 12-Step program blends traditional Native American teachings with an AA-structured 12-step curriculum to provide culture-specific recovery support for American Indian and Alaska Native (AI/AN) populations.[121] Research shows that when African American people with AUD modify AA steps and traditions, they are able to more comfortably affiliate with the organization.[126] Further, many urban community centers, especially in the Southeastern United States, sponsor 12-step program meetings that specifically appeal to members of the Black community. CQ groups, or Fourth and Fifth Step Groups (in Spanish, Grupo de Cuarto y Quinto Paso) for Latino and Latina people with SUD and mental health issues represent cultural adaptations of traditional 12-step programs; in Northern California, Higher Power Group is an offshoot of CQ that requires new members to complete seven preparation meetings and a 2-day spiritual experience in a secluded area during which they complete the fourth and fifth steps of the 12-step program: "making a searching and fearless moral inventory of ourselves" and "admitting to God, to ourselves, and to another human being the exact nature of our wrongs."[127] Other culturally adapted 12-step meetings have also grown in popularity in recent years. For example, 12-step groups specifically for the LGBTQIAA+ population are steadily increasing, and meeting schedules can be found on the Gays and

2022 Recovery Research Summit Speaker Profile

Robert Pack, PhD, MPH

Is the executive vice provost at East Tennessee State University (ETSU) and professor of community and behavioral health in their College of Public Health. As director of the university's Addiction Science Center, director of the ETSU/National Opinion Research Center (NORC) Rural Health Equity Research Center, and co-director of the Opioids Research Consortium of Central Appalachia, he is active in grant work funded by the National Institute on Drug Abuse (NIDA), the Substance Abuse and Mental Health Agency (SAMHSA), the Health Resources and Services Administration (HRSA), the non-profit Patient-Centered Outcomes Research Institute, and the Care Foundation of America. Of substance use disorder (SUD) recovery programs in educational environments, he says, "Let's talk about making teachers and administrators aware of the kind[s] of environments that kids may be living in [and] the kind[s] of traumas that they may have had. Instead of penalizing them for their grades, let's think through how we might assist them with services. Let's also think about society through the trauma-informed lens. Let's think about the university; let's get all the professors some training in this."

Lesbians in Alcoholics Anonymous website[128] and on the meeting list of the Online Intergroup of Alcoholics Anonymous.[129] In the Rooms is a global recovery community that offers free online weekly meetings for people in recovery and a broad array of content for those seeking help for a substance use issue. The service embraces multiple pathways to recovery such as 12-step, non-12-step, wellness, and mental health modalities, including meetings for specific population segments (women, young adults, veterans, and other demographic groups).[130] Mutual aid groups based on the 12-step framework and specific to people with co-occurring SUD and mental health disorders are also becoming more common. Both Double Trouble in Recovery and Dual Recovery Anonymous[131] hold meetings in the United States and feature identification, emotional safety, social support, and increased abstinence—factors that appear to support 12-step recovery for those with co-morbid conditions. Most importantly, the evidence for this type of intervention is compelling, regardless of whether a 12-step program is adapted to specific populations or is true to the founders' vision and structure of a universally applicable program. Twelve-step programs have been tested across numerous populations and the movement revolutionized professional substance use treatment, both as an adjunct to extend treatment benefits and as a primary mode of intervention. Their enduring value cannot be overstated. They are peer-led and fully participatory, are easily accessible in virtually any location, do not require leaders or paid staff, are available to everyone at no cost, are effective throughout the continuum of treatment and recovery, and as demonstrated repeatedly in scientific literature, are equal in efficacy to other evidence-based models of treatment and recovery.[132]

Chapter 5:

Technology as Recovery Capital

As in the entire health care field, recent scientific and technological advances have changed the face of substance use disorder (SUD) treatment and recovery support. Moreso than at any time in human history, clinical interventions for medical conditions and support to sustain those

2022 Recovery Research Summit Speaker Profile

Roger Oser, MEd

Is the principal of the William J. Ostiguy Recovery High School in Boston, where he has served as principal since the school's inception in 2006. One of the first high schools in Massachusetts for young people in recovery from substance use disorder (SUD), Ostiguy High School was the first high school to receive national accreditation by the Association for Recovery Schools. A devoted advocate for community involvement and partnerships as sources of inspiration, validation, and innovation, he is also an advocate for students and school communities in danger of being marginalized. He is a Lynch Leadership Fellow at Boston College, working to increase the impact of recovery high schools for underserved populations. Speaking at the 2022 Recovery Research Summit on his experience leading a recovery high school, Oser said, "Recovery's about community, about peer support, [and about] making sure no one's left behind—and if we aren't looking at our organizations with a very critical eye [regarding] diversity, equity, and inclusion, then we're not upholding... those core values."

interventions are at the fingertips of over half of the world's people because of technology. Global internet use has grown more than 1,400% in this century, and in the United States, more than 325%. Among the 20 countries with the highest rates of internet users in 2021, only Vietnam, which reported that 100% of its population uses the internet, outpaced the United States, at 94.6%.[133] For every 100 people in the United States in 2020, there were 106 mobile cellular phone subscriptions, according to the World Bank.[134] It is not surprising, then, that digital devices, software, and programs have been thoroughly integrated into our health care landscape. Mobile platforms have steadily become more portable, accessible, and affordable, and the quantity and quality of online information and mobile over-the-counter applications (OTC apps) have grown exponentially.

The history of technological innovations that have affected the clinical care of mental health and SUD goes back centuries. Long before neuroimaging advanced sufficiently to facilitate the mapping of the human brain that has improved our understanding of SUD, scientists began developing devices to record biosignals: signals, often electrical, that are found in living things and that can be measured and monitored either through electrodes attached to the skin or remotely. In 1909, the electrocardiogram made its U.S. clinical debut at Mt. Sinai hospital in New York, where it was used to study arrhythmias, and 15 years later, the first human electroencephalograms were recorded in Germany. Steady expansion, refinement, and improvement of devices to measure biosignals have facilitated the development of biofeedback as a clinical tool for many health conditions, including SUD.

Biofeedback enables individuals to develop self-regulation mechanisms to control affective, biological, and cognitive skills. Research has identified five key properties of the mechanisms of biofeedback learning: perceptibility, or whether individuals can perceive the biosignal; autonomy, or whether individuals can regulate independently; mastery, or the degree of control they have over the biosignal; motivation, or rewards systems of biofeedback; and learnability, or the possibility of learning how and when to use biofeedback to regulate behavior and emotions.[135]

Today, biofeedback applied to the brain—neurofeedback—is routinely used as a therapeutic method in SUD treatment and for relapse prevention. Studies show that neurofeedback training, used with medication-assisted treatment, is more effective than pharmacotherapy alone. It has been shown to decrease cravings and improve the general mental health of patients with both alcohol use disorder (AUD) and those with opioid use disorder (OUD),[136] and to improve somatic symptoms and depression, as well as reducing the desire to use opioids.[137] Evidence has also shown

2022 Recovery Research Summit Speaker Profile

Sachini Bandara, PhD

Is an assistant professor in the Department of Mental Health and director of the Center for Mental Health and Addiction Policy Research at the Johns Hopkins Bloomberg School of Public Health. She conducts research to evaluate mental health and substance use policies, with a focus on the impacts of financing reforms, policies affecting individuals involved in the carceral and child welfare systems, and policy responses to the U.S. overdose crisis. She also conducts research to identify communication strategies that can reduce public stigma and improve support for public health policies. She spoke at the 2022 Recovery Research Summit about research into the various ways local and national news organizations present recovery and substance use, as well as her strategies and experience coaching journalists on framing addiction stories in a way that, as she explains, "humanize[s] the experience of people who are in recovery."

that neurofeedback-trained subjects can "transfer" these effects—maintain their ability to regulate neural signals in the absence of feedback—a significant capability for supporting SUD recovery.[138]

Neurofeedback training that employs real-time functional magnetic resonance imaging (rtfMRI) has been applied clinically in recent years as a method to train individuals to self-regulate areas of the brain involved in addictive behaviors, including substance use. Participants use rtfMRI feedback to modify behavior, enabling them to exert control over brain activation that can trigger use of multiple substances to reduce the symptoms of withdrawal.[139] Ability to control both emotion and behavior, learned through neurofeedback training, is an important skill that adds to recovery capital and can help SUD patients sustain abstinence and maintain remission. However, additional research is needed to codify the effects of neurofeedback training and practices on long-term recovery, determine which stages of recovery benefit most from neurofeedback training, and ascertain whether there are measurable relapse-prevention benefits to periodic refresher training.

2022 Recovery Research Summit Speaker Profile

Sarah Zemore, PhD

Is a senior scientist at the Alcohol Research Group (ARG) who recently served as the associate director of ARG's National Institute on Alcohol Abuse and Alcoholism-funded National Alcohol Research Center and as director of ARG's T32 Training Program in alcohol epidemiology. Much of her work addresses how race/ethnicity, gender, and socioeconomic status relate to alcohol and drug epidemiology, treatment, and recovery. Her research also focuses on mutual help groups and their mechanisms of action, as well as treatment motivation and processes. At the 2022 Recovery Research Summit, she discussed research she has supported to examine recovery differences and treatment gaps across races and ethnicities, explaining, "[Widening] our understanding of recovery [means] we have the potential to invite more people into recovery-related services." She also spoke about the need for more research on integrating new recovery strategies into a field heavily dominated by abstinence and 12-step framing.

Technology also presents an enormous potential to expand therapeutic reach to people living with SUD who cannot or will not access many available treatments and recovery support systems. The federal government is actively engaged in efforts to maximize the potential and capacity of digital platforms and programs to support SUD prevention, treatment, and recovery. In July 2022, the National Institute on Drug Abuse (NIDA), National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institute of Mental Health (NIMH), and other National Institutes of Health (NIH) organizations and offices sponsored a workshop to examine the design, development, and dissemination of digital health interventions and to identify pathways, requirements, and capabilities needed to develop and sustain effective digital health interventions.[140] The Substance Abuse and Mental Health Services Administration (SAMHSA) reaches consumers directly through digital products, including a prevention app to help parents talk to their children about substance use[141] and one for students that shows the effects of alcohol on the brain.[142] NIAAA issued a national challenge for the design of a discrete device to measure blood alcohol levels and awarded a $200,000 first prize for a continuous, non-invasive monitor, worn on the wrist, that connects to a smartphone to store data.[143] The NIAAA website includes a consumer-centered page with research-based information, worksheets to evaluate drinking, and calculators for measuring cost, calories, and alcohol content of different sizes and types of drinks. The agency also fielded an online resource in May 2022 to help health care professionals improve care for people whose alcohol consumption may be impacting their health.[144] NIDA and SAMHSA collaborated to develop

an online product that provides information, training, and resource details for implementing technology-assisted treatments and care to improve the quality and reach of treatment and recovery services for people with SUD. Available at https://sudtech.org/, the site contains testimonials, curriculum, and current research outcomes on computer-based interventions such as web-based support groups, virtual reality sites, computer-facilitated and internet-based substance use screening, and video games, all of which have the potential to extend clinical interventions for substance use. The site provides links to current studies focusing on specific substances, populations, or problem areas, and it includes references on studies related to technology use in treatment and recovery from alcohol, cannabis, and opioid misuse.

In the private sector, the rise of telehealth availability and online support groups has made clinical and organizational assistance more readily available to many people living with SUD who have had barriers to these services in the past. Smart phones and tablets have moved beyond communication and entertainment functions, crossing into wellness, disease prevention, and health care to leverage the power of software for treatment and recovery. These technology-based interventions are disseminated widely and, as a result, have the potential to reach far more people who need treatment and recovery support. They provide a level of standardization not always found in SUD treatment and recovery services, and at the same time require less clinician training and availability, making them generally more cost-effective than face-to-face interventions. They can be especially appealing for people with SUD, for whom cost, privacy, and anonymity are very important and yet represent barriers to services.[145]

OTC apps for mobile devices can support recovery by enabling patients to get help and advice on demand. These apps also perform a broad range of other functions, including but not limited to: geolocation to help individuals avoid triggers such as bars and to find mutual- and self-help meetings, medication clock and calendar reminders, progress calculators, on-demand and scheduled encouragement and activities to help maintain abstinence, digital and peer-to-peer coaching forums, guided SUD-focused meditations, and training and education programs to improve people's understanding of their particular SUD. They enable these individuals to employ multiple sources of recovery support through interactive and static programs, to participate in peer-to-peer and group sharing, to access individual and group therapy sessions, to track their progress, and to plan for challenges.

Prescription digital therapeutics (PDT) are similar to traditional medicines and medical devices in that they are tested in clinical trials, are subject to authorization by the U.S. Food and Drug Administration (FDA), and are prescribed by physicians. They are available as treatment and recovery aids for SUD as well as for many other

2022 Recovery Research Summit Speaker Profile

Todd Dunn

Is president of United Auto Workers (UAW) Local 862, representing nearly 14,000 active workers in Kentucky plants, in addition to 5,000 retirees and 700 surviving spouses. He has served as a district committeeman and is on the UAW Local 862 executive board as a trustee. As a labor leader, he developed a passion for the UAW/Ford Motor Company's collaborative involvement in community services and is a Charles T. Clark Community Services Award recipient. He previously served in the U.S. Army as a combat military policeman/investigator in Iraq and with the Army's criminal investigation division. At the 2022 Recovery Research Summit, Dunn spoke of the importance of recovery-friendly workplaces for people with substance use disorder (SUD) and the value of labor's involvement in ensuring that people in recovery get the support they need to achieve remission, including support on the job.

conditions, ranging from diabetes to mental health disorders to neurological diseases. During the 2022 Recovery Research Summit, Yuri Maricich, MD, MBA, former head of development and chief medical officer at Pear Therapeutics, discussed the potential that PDTs present to SUD recovery. According to Maricich, PDTs can combine behavior therapy and medication monitoring on digital platforms to support patients more effectively across the full scope of the disorder. PDTs are discreet and convenient, are easily accessible, give patients immediate access to treatment and recovery modalities, and can provide clinical data to prescribers. Clinicians can use these data to develop and refine individualized treatment and recovery plans and to monitor patient progress. Researchers can possibly use data to identify significant factors that affect outcomes. The FDA has approved a device designed for alcohol, cocaine, marijuana, and stimulant SUD treatment and recovery and one designed for OUD, both of which are already covered by some insurance plans. Of PDTs, Maricich says their potential for good is enormous and they may help improve outcomes across a wide range of diseases as well as bridge gaps in existing models of care. However, this technology will continue to be of limited use as a tool in SUD treatment and recovery until research ascertains the most effective PDT interventions, how well PDTs work across the exposure/addiction/treatment/recovery continuum, which populations benefit most from their use, and what other interventions combine well with them.

In general, research on technology-based interventions is still in the early stages. Efficacy of most OTC apps is not measured and research on their usefulness as stand-alone aids or in conjunction with formal treatment is limited. However, the evidence base on digital recovery support services (D-RSS) is growing steadily. A 2019 systematic review concluded that a primary benefit of D-RSS is the delivery of on-demand support that is unhindered by traditional obstacles to in-vivo supports: transportation, cost, or local availability. Further, observational findings indicate that these services are frequently used to augment in-vivo supports. The study also found that D-RSS offer more diverse recovery supports, appeal to a more demographically diverse population, and are used by individuals not typically considered to be in recovery but who want to modify problematic substance use for wellness purposes.[146] Studies on tobacco, alcohol, and drug abstinence show that using technology for treatment and recovery support can produce better outcomes compared to control conditions, but the effects are not always consistent, often have modest impact, or in some cases, show no significant effect. More importantly, mechanisms by which technology produces change in outcomes have not been studied sufficiently.[147,148] In addition, measuring and validating the effects of human contact as an element of SUD treatment and recovery compared to or along with remote- or technology-based interventions is inadequately studied. Digital technology as an element of SUD treatment and recovery should, at a minimum, enhance interactions between patients and clinicians and between patients and their recovery coaches and peer guides; knowing which applications are most effective can likely help both groups maximize the impact of current and future technological advances within SUD treatment and recovery frameworks.

Digital technology is also emerging as a valuable tool for research itself. A current study supported by NIDA is systematically assessing the feasibility and utility of digitally derived data from ecological momentary assessments, smartphone and smartwatch passive sensing, and social media use, all collected from the same sample of individuals in treatment with medications for OUD. The study may be useful in detailing relations between digital data sources and treatment or recovery service outcomes, inform approaches to enhancing outcomes measurement in clinical trials, and inform specific digital data collection protocols.[149]

SUD During the COVID-19 Pandemic

The COVID-19 pandemic has placed enormous burdens on global health care systems and has had a significant impact on people with SUD. In its list of medical conditions with the greatest likelihood to contribute to poor health outcomes as a result of COVID-19, the Centers for Disease Control and Prevention (CDC) has included SUD as being associated with a higher risk for severe illness.[150] Research conducted before vaccines were authorized found that people with SUD had an increased risk of becoming infected with the SARS-CoV-2 virus and were more likely to be hospitalized and die from COVID-19.[151] Even after COVID-19 vaccines became available, studies suggested that both vaccine hesitancy and vaccine inaccessibility among those with SUD may have resulted in lower vaccine rates and, therefore, higher infection rates.[152] Another study found that even people with SUD who were fully vaccinated were more likely than vaccinated people without SUD to contract COVID-19.[153] In addition to health risks from COVID-19 among people with SUD, both fatal drug overdoses and self-reported SUD have increased in the United States during the pandemic.[154] At the same time, data in one study show a national decrease in SUD treatment admissions of 23.5% as well as decreases in nearly all states—a possible factor in the simultaneous increase in drug overdose deaths.[155]

Nonetheless, technology has made possible a multitude of pandemic-driven changes affecting those with SUD, including many that continue to be beneficial. During pandemic lockdowns, for example, use of video conferencing soared. Zoom, the top videoconferencing platform in the United States, had about 10 million daily meeting participants in December 2019, and by April 2020, that number was over 300 million.[156] Both quality and reliability of technology for virtual meetings improved dramatically during the pandemic, as did available platform options. Clinical practices turned to telehealth to serve patients, with the percentage of patients having video telehealth visits jumping from 4% before the pandemic to 45% by March 2021. Comfort with and willingness to use telehealth across all population groups also increased markedly during the pandemic, with large increases among Black adults and adults with lower education levels.[157]

A recent study showed that traditionally marginalized and underserved populations, including lower-income, non-White, and non-English-speaking people, were more likely to use telehealth during the pandemic, indicating that populations with significant barriers to health care for conditions like SUD may benefit from a broader public acceptance of remote and virtual treatment and other services.[158] Many SUD and mental health practices, mutual help groups, and peer-to-peer support organizations are continuing to offer virtual appointments and meetings for people who cannot or prefer not to participate in person. Numerous state mental health and SUD services offices are still promoting online SUD recovery support in addition to educational videos and presentations on their YouTube channels. Mutual help organizations such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) hold virtual and hybrid meetings, and AA has a developed a directory to help people find online meetings and resources on the Online Intergroup of Alcoholics Anonymous (OIAA) Directory.[159] Finally, no-cost or low-cost OTC mobile apps that offer recovery services such as digital coaching and counseling, abstinence calendars and clocks, daily motivations, and social networks have rapidly proliferated and significantly increased the options that people in recovery from SUD have to obtain support that could help them prevent relapse and sustain remission.

Chapter 6:

The Workplace

The workplace presents a significant growth opportunity for people in substance use disorder (SUD) recovery. Going to work is a routine part of adult life that accords responsibility, sets standards of behavior, provides structure and financial resources that enable a level of independence, requires and enables a wide range of human interaction, and contributes to self-efficacy and self-esteem. In addition, the workplace is often the main source of access to SUD treatment and maintenance services through employer-provided health insurance. As a common and normalizing environment, the workplace has enormous potential to provide safety and support that is crucial to sustained recovery from SUD; at the same time, it has significant potential to function as a daily challenge to those in recovery. Although it is impractical to expect workplaces to fill every gap in recovery support for their employees and managers, it is essential that they contribute to the goal of a recovery-ready nation. How we make more workplaces a consistent source of recovery capital—given their enormous diversity in size, purpose, productivity and profit, culture, and physical environment—is the challenge.

New Workplace Research

Discussions of SUD in the workplace often focus on its costs. Less is known about recovery in the workplace, including people's attitudes toward coworkers in recovery and their knowledge about benefits that recovery-friendly workplaces can offer employees in recovery, as well as their employers and coworkers. The 2022 Workplace Recovery Survey sheds light on the experiences people have in their own workplaces, whether they are one of the 14 million employed adults in recovery themselves, have a close relationship with someone living with active SUD or in recovery, or work with people they know to be in recovery. The survey begins to address the national call for a recovery-ready workforce by examining the experience of American workers in recovery, as well as attitudes and beliefs employees and managers hold and that influence workplace culture. It explores how workers, supervisors, and executives see their workplaces in relation to SUD and recovery and what they know about the level of support people can access there. This information helps improve the understanding of lived experiences of full-time workers in recovery and those working alongside them; it will ultimately spur additional research on the issue and drive recommendations for creating supportive workplaces for people in SUD recovery.

2022 Recovery Research Summit Speaker Profile

Tom Berkery

Serves as the chair of the board for the Global Recovery Initiatives Foundation and is a person in long-term recovery. He has been instrumental in supporting the Foundation's sponsorship of both the 2020 and 2022 Recovery Research Summits. He is a director at PricewaterhouseCoopers (PwC) where he serves in their Capital Markets and Accounting Advisory Services Group. Berkery helps advise large corporations, private equity investors, and investment bankers on complex accounting and financial reporting issues associated with mergers, acquisitions, divestitures, and other corporate finance transactions. He is a Chartered Financial Analyst (CFA) charter holder, and a licensed certified public accountant (CPA) in the state of New York. He currently lives in Brooklyn.

The survey sample is representative of the adult American workforce. It explores the following key areas:

- Personal experience with SUD and recovery, including experience with other people who have SUD and/or are in recovery.
- Knowledge and understanding of workplace policies on SUD and recovery.
- Knowledge of employer-provided resources for SUD treatment and recovery support.
- Stigma surrounding SUD and/or recovery status and its effect on willingness to disclose that status to various people in the workplace.
- Overall levels of psychological safety, comfort, and trust in the workplace.

Survey participants are at least 18 years old, live in the United States, and work at least 35 hours a week for a company with at least 10 employees. Over two-thirds work at a for-profit company or organization, 15% work for local or state governments, and 10% work for nonprofit organizations. Six out of 10 participants self-identify as employees, with the remainder being either entry-level, middle, or senior managers. Two-thirds of respondents work in person, 12% work remotely, and 18% work on a hybrid schedule. A quarter of respondents indicated that they have or have had SUD, and nearly a third of respondents said they know someone who currently has or has had SUD. Seven out of 10 respondents currently get health insurance through their employers and 6% said they do not have health insurance; the remainder have health insurance through a source other than their employer. Of those with health insurance, over two-thirds do not know whether their insurance covers treatment for drug or alcohol use. The survey also covers knowledge of workplace policies on substance use and paid leave benefits for both SUD treatment and recovery services.

A significant portion of the survey deals with workplace culture, including:

- Personal attitudes and company/coworker attitudes about people with SUD and/or in recovery;
- Level of stigma in the workplace as it relates to SUD and recovery and willingness to disclose substance use to coworkers, supervisors, or others in the company;
- Knowledge of workplace support for SUD treatment and recovery (e.g., time off to manage SUD, work–life balance); and
- Personal knowledge of and actions taken in response to substance use by coworkers.

The survey identifies seven key insights:

1. People in the workplace get it. Most participants are familiar with the concept of substance use recovery. Language about recovery as an "active process" or for "seeking help" or "getting treatment" resonates with most employees.

Nearly nine out of 10 participants said they have heard of substance use recovery; when asked to describe recovery in their own words, many mention "overcoming" addiction or substance use, "actively working" to stop using substances, avoiding drugs or alcohol, or remaining "sober." About a quarter of respondents mention "getting help" or treatment for substance use. Employers can institutionalize recovery-friendly language in workplaces by using it in their formal and informal communications with employees.

2. Recovery is a positive thing. People either change their personal opinions about someone for the better or do not change them at all when they learn the individual is in recovery.

Although the survey indicates that employees have concerns about disclosing their recovery

status, this insight suggests that they may face fewer negative reactions than they believe they will. By addressing this disconnect during employee onboarding, in regular internal communications initiatives and materials, and through training for all levels of management, employers can help employees feel more confident about disclosing their recovery status.

3. It works if everybody works it. Managers as well as coworkers play a vital role in establishing a recovery-friendly workplace.

Over four in 10 survey respondents said they are willing to tell a manager or coworker about needing help with substance use; top reasons for willingness to share SUD recovery status with a manager included the manager's personality ("caring and understanding") and a specific invitation from a manager to come to them if they are experiencing a substance use problem. One avenue to increase this metric is to encourage those in SUD recovery to talk to their managers. Increasing awareness of and options for management training to help supervisors communicate comfortably with employees about SUD recovery support, including the full range of benefits available to them, can also improve recovery readiness.

2022 Recovery Research Summit Speaker Profile

Tom Coderre

Is the Substance Abuse and Mental Health Agency's (SAMHSA) Region 1 administrator, where he is actively involved in improving support services for people in recovery from substance use disorder (SUD). As senior advisor to the governor of Rhode Island, he played an integral role in leading efforts to combat the state's opioid crisis. He previously served as SAMHSA's chief of staff, leading the team that produced the first U.S. Surgeon General's report on alcohol, drugs, and health. A former national field director of Faces & Voices of Recovery, Coderre has an extensive background in both government and public health and is widely recognized for his advocacy of policies that help prevent SUD and support those in recovery. Coderre reflected at the 2022 Recovery Research Summit on the nature of addiction as "a disease of denial... a disease where people are ashamed of having it" and how we can combat this stigma by "creating that culture in the workplace where people can come forward and be open about [their recovery]."

4. Words matter—and more words are better. Communication about available SUD resources is too rare in the workplace, as is support for talking about experiences with these services.

Based on this survey, there is little doubt that communication about SUD resources available in the workplace is inadequate. Nearly four out of 10 respondents said their employer never communicates about available support or education for SUD, and half said their employer never encourages employees or managers to share their recovery experiences in the workplace. And although over 90% of respondents have health insurance, either through their employer (70%) or through another source, over two-thirds of insured respondents do not even know whether their insurance covers SUD treatment or recovery services. Ramping up communications about health insurance and other benefits the workplace offers to support those living with or in recovery from SUD could lead to increased use of those benefits.

5. If they don't know about it, then they can't use it. Too many employees are unfamiliar with benefits their companies provide to support SUD treatment and recovery.

Only about one in five survey respondents reported that they have paid leave for SUD treatment, yet twice that number reported having paid leave for physical health problems. This difference suggests that employees are not aware that, under the federal Mental Health Parity and Addiction Equity Act (2008), they are entitled to use paid medical leave for SUD treatment and recovery, as well as for physical health needs. One step in developing a recovery-friendly workplace is to ensure that benefits such as health insurance coverage for SUD recovery services and paid medical leave are adequate, are explained during onboarding, and are frequently and deliberately presented to employees and managers at all levels in staff meetings, trainings, and through other forms of employee communication, such as signage in break rooms or employee bulletin boards. It is also essential that local, state, and federal agencies keep businesses informed of government-mandated benefits and monitor compliance.

6. Workers worry about losing their jobs. Employees need paid leave, flexible work hours, and SUD treatment and recovery resources, but they also need the confidence to take advantage of those benefits.

In addition to identifying paid leave, flexible work hours for recovery activities, and other resources and training for SUD recovery, survey participants said they would like to know that they would not lose their jobs if they were to seek SUD treatment or recovery assistance. Establishing and enforcing policies that protect people's jobs when they use workplace-provided benefits for SUD recovery can boost employee trust in the companies that hire and retain them.

7. Coworkers talk to each other. When concerned about a coworker's substance use, people are most likely to talk to that coworker or suggest workplace resources.

Employees in companies with a culture and values that support SUD recovery are more likely to seek help themselves and to offer support and help to those who need it. About two in 10 respondents said they would talk to a coworker about substance use and would offer workplace resources if they were concerned about that coworker; for people with personal SUD or recovery experience, that number increased to about three in 10. Training supervisors at all levels on the company-provided benefits that support SUD treatment and recovery, as well as ensuring that employees know they can safely talk to a supervisor about their own or a coworker's substance use, could increase those metrics.

Additional Workplace-Related Research

Although the Survey sheds light on the status of workplace communications,

2022 Recovery Research Summit Speaker Profile

Yuri Maricich, MD, MBA

Asks, "When is someone ready for recovery? How do we measure that? What are the stages of recovery? How do we measure that? When are they in remission? How do we measure that?" Maricich seeks to answer these and other key research questions related to recovery. As former head of development and chief medical officer of the clinical, regulatory, and quality groups at Pear Therapeutics, he worked to improve patient health and health care systems by advising and providing leadership at innovative firms. His presentation at the 2022 Recovery Research Summit highlighted the urgent need for adequate funding of substance use disorder (SUD) and mental health research to gain greater insight into the many factors and stages of SUD, to support a wide range of different treatments including those that use new and developing technology, and to ensure coverage and reimbursement for patients after treatment.

benefits, support, and culture related to SUD treatment and recovery, other research examines workplace and employment factors that contribute to the low uptake of SUD treatment and recovery services or that constitute significant barriers to sustained recovery. For example, even though the federal Mental Health Parity and Addiction Equity Act (2008) mandates certain health insurance coverage for mental health treatment, and the Affordable Care Act (2010) requires insurers to cover SUD treatment in parity with medical and surgical services, plans continue to deny people access to insurance benefits for SUD-related services. A 2021 research brief describes SUD, and particularly the opioid crisis, as an occupational safety and health emergency. The article reports on the impact that coalitions composed of advocates from labor, occupational safety and health emergency[160], and the recovery community have had in driving comprehensive policy reforms in New York State to respond to the opioid crisis. In addition to legislative initiatives, the state has established the first-in-the-nation Office of the Independent Substance Use Disorder and Mental Health Ombudsman. The program, known as Community Health Access to Addiction and Mental Healthcare Project (CHAMP), helps individuals access their health insurance benefits and to investigate, refer, and resolve complaints on behalf of consumers. The state has also shifted from an acute care model to a chronic care model to cover the full continuum of care required in SUD recovery. This model of care that provides enhanced recovery support services includes Medicaid-managed care for in-community services, such as peer recovery support services and family support navigators.

A key element in creating more recovery-friendly workplaces is to encourage employers to hire people in recovery. Having individuals with lived SUD experience in the workforce, especially those who are comfortable acknowledging their recovery status, exposes more people to the complexities of SUD recovery and generally improves workplace culture for others living with SUD. A recent University of Kentucky Injury Prevention and Research Center paper published in BMJ Journals' *Injury Prevention*[161] reported on in-depth interviews with small businesses to assess workforce capacity and experience in hiring employees in recovery. The interviews also produced information on the usefulness of a recovery-friendly workplace toolkit aimed at small businesses without the human resources capacity to establish policies and regulations for hiring and retaining these workers. The research found small employers are extremely interested in affordable practical resources to help them develop policies and programs to improve recovery readiness in the workplace. The research also identified a gap in current availability of recovery-friendly workplace resources tailored for small businesses.

> Data from the National Survey on Drug Use and Health (NSDUH) consistently shows that people who work more hours a week are less likely to engage in substance use. Yet when the nation had a near-record-low unemployment rate of 3.7% 5 years ago, unemployment rates for people in recovery were three times that high. In all, 14 million adults who self-reported being in recovery said they had either part-time or full-time employment. Nearly 2 million adults in recovery said they were jobless involuntarily.
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> Footnote: Eddie, D., *Journal of Substance Abuse Treatment*, 2020 From working on recovery to working in recovery: Employment status among a nationally representative U.S. sample of individuals who have resolved a significant alcohol or other drug problem

Results from a 2020 National Safety Council Survey on prescription drugs and the U.S. workforce[162] showed that nearly seven out of 10 employers reported concerns related to prescription drug misuse and that under half of employers are very confident that they have policies in place for dealing with issues related to SUD. Survey participants comprised 501 employers with 50 or

more employees who responded to a proprietary questionnaire. Substances of most concern to employers were alcohol (25%) and opioid pain relievers (24%). Employers who agreed that misuse of prescription drugs is a justifiable reason to fire an employee were very likely to act on that belief, with nine out of 10 likely to dismiss that employee. In contrast, employers who recognized misuse of prescription drugs as an issue in their workforce or understood its impact on employee retention were more likely to choose careful monitoring of the employee. In formal written policies, drug testing was the topic most likely to be covered, followed by employee use of illicit drugs and return-to-work policies for employees undergoing treatment for SUD. The survey also found that employers with employee assistance programs were significantly more likely to return employees to work after instances of workplace substance use. By contrast, companies that perform drug testing on employees were significantly more likely to dismiss employees found to be misusing any of the substances surveyed. Finally, the survey found that while all initiatives surveyed improve overall preparedness to deal with prescription drug misuse, the greatest marginal benefit came from workplace training about prescription drug usage. Significantly, this was also the initiative least commonly offered by employers.

Chapter 7:

Strategic Considerations

As stated in the introduction to this report, the purpose of the 2022 Recovery Research Summit: Advancing a Recovery-Ready Nation was to raise the profile of recovery support in successful substance use disorder (SUD) management and to encourage actions that will continue to increase awareness of priorities for recovery research, policy, and essential services. Summit organizers and participants did not discuss creating formal recommendations out of the summit; however, given the information and insights that emerged during presentations and informal discussions, Global Recovery Initiatives Foundation and Fors Marsh believe that it is appropriate to include strategic considerations and possible action items as part of this report. Our goal in so doing is to encourage further conversation and information sharing that will extend the reach of the summit and provide food for thought for the many stakeholders who work daily to improve the summit space and experience for those living with SUD.

Overview: Recovery Capital	
Strategic Considerations	**Expand research on recovery capital.** • Measures (including reliability and validity) • As a measure of recovery status/progress and predictor of outcomes • As a recovery-planning or treatment-planning tool/construct, including in relation to self-management approaches • Applicability to systems (family, community, employer, school, etc.) • As a community-level measure
Action Items/ Smaller-Scale Work	• Create measures and evaluate across settings. Possibly use public health students and researchers to carry out this work. • Look at data that may be present at the level of community organizations—what do they collect and what does it tell us?

Action Items/ Smaller-Scale Work Continued	• Systematically compare recovery-planning tools in use, including self-management tools. • Develop trainings or other information for families/schools/employers to raise awareness of recovery capital. Collegiate recovery organizations may already have some of these to build upon.

Strategic Considerations	Review policies that are intended to discourage or interrupt drug use or sales but that unintentionally impact recovery capital and reduce recovery potential.
Action Items/ Smaller-Scale Work	• Fair chance hiring is one example. What data exists on its success/challenges? Are there other hiring practices that might be discriminatory? • Skill licensure policies (e.g., loss of licenses, prohibitions on earning licenses), as well as insurance exclusions for workplaces that hire people with criminal convictions, deny employment opportunities for many people in recovery. Publication of state-by-state license and insurance policies could help researchers assess economic impact, recovery/relapse outcomes, and other measures of the effects of these policies. • Note 1: Workplace survey data suggests that flexible work schedules are important to people in recovery because they accommodate ongoing recovery support (meetings, methadone, etc.). • Note 2: Health care providers are advocating for at-home methadone consumption, either supervised via telehealth or not. Can we evaluate the early experiences of those programs? (If you require people to take methadone in person, you may compromise their ability to hold some jobs with particular start/end times.) • Ask people in recovery, or people who have returned to use, what policies/ laws they see as challenging to their ongoing recovery.

Strategic Considerations	Expand research and knowledge base of pathways to recovery, drivers for specific choice of pathways, and enablers and barriers to recovery based on specific pathways. We have a lot of knowledge about treatment interventions and less about the recovery process and recovery support services. The majority of Americans who need treatment do not access it. Yet the majority of people with SUD eventually resolve those problems, often through assisted pathways such as treatment, mutual aid, and peer recovery support services, but sometimes in other ways. We need to better understand the diverse trajectories people follow from an alcohol and other drug problem to resolution (remission, recovery, or lessened severity and improved quality of life).
Action Items/ Smaller-Scale Work	• Undertake a comprehensive environmental scan for existing research on pathways to recovery, including collegiate recovery programs, criminal justice systems, etc. • Partner with criminal justice systems to trace the recovery journey of people whose experience includes drug courts and other diversion programs. • Research shows that SUD can affect multiple generations of individual families. What information can we get from those whose families have a history of SUD, and what can they tell us about factors that are protecting and endangering recovery?

Strategic Considerations	Grow the research on key elements of recovery capital and how they impact the diverse range of recovery/remission/resolution trajectories, identifying factors associated with problem resolution as well as potential intervention points and strategies.
	• What do we know and what do we need to learn about recovery as a psychosocial process and as a neurobiological process?
	• How do we define and measure effectiveness of peer recovery support services (PRSS) and the optimal definition of "peer" in this context?
	  • How important is:
	  - Shared community and culture, including military or law enforcement experience, LGBTQIAA+ identity, etc.?
	  - Age?
	  - Shared SUD (e.g., alcohol, opioids, stimulants, etc.)?
	• How and to what extent should we think about organizing PRSS?
	  • What role does the peer worker's organizational home (e.g., treatment provider, recovery community organization [RCO], hospital emergency department) play? What are the advantages and disadvantages of various organizational homes and of colocation agreements, and what implications does this have for funding policies?
	• How important is a substance-free living environment to recovery? How should they be structured and credentialed? At what points along the recovery journey are recovery residences and substance-free educational environments most effective?
	• How effective are treatment centers at helping patients access recovery support services in their geographic regions? How effective are self-help and mutual-help organizations at making members aware of recovery support services in their areas?
	• What roles do employment and recovery-friendly workplaces play in supporting SUD recovery?
	• How can we extrapolate research findings on the effects that recovery capital elements have on other health issues and use them to inform SUD research decisions so that efforts don't necessarily have to start from scratch? For example, is there research on the effect of smoke-free workplace policies on smoking prevalence? What about workplace smoking cessation support like education and discussion groups, promotion of health care coverage for cessation treatment and support, etc.?

Action Items/ Smaller-Scale Work	• For consumers, finding comprehensive listings of recovery community centers or organizations, recovery residences, recovery programs in educational environments, and other recovery support services can be daunting. Such listings exist but most often are found on websites of nonprofit organizations, not all of which are easily discernible from the many paid listings placed by for-profit entities. Even people coming out of treatment are often not provided with information on local recovery support services—and many treatment centers only inform patients of their own support services. How can we help build or strengthen a network between treatment centers and recovery support providers? Should state drug control offices be engaged in this kind of effort? Are there states that are more successful at helping people with SUD access support along their entire recovery journey, and can we find them?

Strategic Considerations	The impact of stigma on SUD treatment and recovery is significant, yet interventions to reduce the stigma associated with substance use are very limited. In part, this is due to equally limited research.
	• How do stigmas and stigmatizing language affect factors such as:
	  • Support for health-focused policies vs. punitive-only policies?
	  • Quality and accessibility of medical care during both treatment and recovery?
	• Are current federal substance use-related stigma reduction efforts adequate and effective? How might they be strengthened and expanded?
	• What research would help advance policy (e.g., through a better understanding of effective messaging/communications strategies as well as potential engagement/intervention points and approaches)?
	  • Federal public health communications campaigns (e.g., HIV/AIDS, COVID, smoking) have proven to be highly effective at increasing positive health attitudes, beliefs, and decisions. Is now the time for a comprehensive campaign (e.g., ads, testimonials, trusted messengers, partnership engagement, influencers) to address stigma against people with SUD?
	  • Should such a campaign include physician outreach to address negative attitudes about treating individuals with SUD?

Action Items/ Smaller-Scale Work	A search for evaluation research on successful public health campaigns could help funding agencies identify essential elements of a stigma campaign as well as achievable goals and objectives. Similarly, a search for relevant studies on physician outreach campaigns could help the funding agencies determine whether reducing stigma in the medical community against people with SUD should be part of a larger public health campaign or a separate effort.

Research Panel I: Pathways to Recovery: The Role of an Internal and/or External Locus of Control to Support and/or Drive Change	
Strategic Considerations	SUD recovery is not a one-size-fits-all process, and communities are not monoliths. They may include teenagers using heroin, 70-year-olds drinking because of grief over the death of a spouse, affluent and working-class people addicted to opioids, highly educated physicians, and people with extremely low health literacy. There is real value in research that helps us learn: • How significantly recovery is affected by variation and patterns in addiction and recovery trajectories, the prevalence of these patterns, and their relationship, if any, with factors such as age, gender, race/ethnicity, socioeconomic status, etc.; • The effectiveness of various strategies to develop autonomy/recovery capital/increased internal locus of control. • How best to balance strategies to foster internal control and external resources, supports, and structure. What do we know about how these should be balanced over time? • What factors facilitate help-seeking and/or motivate action to begin addressing the negative impacts of SUD? • The role of mutual aid groups and PRSS in providing external structure and support, and in facilitating increased reliance on an internal locus of control.

Strategic Considerations Continued	• How do mutual aid and PRSS differ in terms of their impact? • Are there individuals who benefit more from one than the other? If so, do these individuals tend to have common characteristics that can be used to help inform interventions or individual choice within recovery from SUD? • How do internal and external recovery capital interact? Can community-level strategies to increase relevant community resources have a broader impact on substance use/recovery outcomes?
Action Items/ Smaller-Scale Work	The work of tracing recovery journeys—or tracing the small steps they comprise—has already begun. Meta-analysis of existing work (both peer-reviewed and work held at the community level) can provide groundwork for further exploration.

Strategic Considerations	Assess the role technology can play in helping people achieve, strengthen, and sustain recovery. How effective is technology that is currently available and marketed toward those with SUD?
	• What roles can technology play in:
	  • Recovery initiation?
	  • Recovery stabilization and enhancement?
	• Are there technologies/platforms that are effective in these or related functions?
	  • What types of technology (e.g., mobile applications, wearables, calendars, reminders, progress measures) have been effective for other substances (e.g., tobacco use) and populations (e.g., older people, youth, and young adults) or for other conditions (e.g., diabetes, epilepsy)?

Action Items/ Smaller-Scale Work	Current FDA-authorized technology is also used for health issues other than SUD and mental health disorders. What can we learn from research on technology use for other diagnoses?

Research Panel II: Pathways Within Recovery: The Role of External Conditions, Described as Social Determinants of Health (SDOH), and How they Impact Sustained Recovery	
Strategic Considerations	The social determinants of health are greatly influenced by decades, even centuries of discriminatory policies that continue to impact minority communities, even after the policies have been changed. These social determinants are a crucial form of recovery capital. So too are culture, social identity, purpose, and a sense of belonging. It is important to learn more about the interplay of these elements and their relationship to recovery outcomes/ prevalence. Study the intersection of social determinants of health and internal forms of recovery capital (e.g., coping skills, self-efficacy) with the goal of developing and piloting strategies to improve individual recovery outcomes and community-level recovery prevalence. • How do the concepts of social determinants of health—an element of external recovery capital—and of internal recovery capital relate to one another? • Will any effort to address SDOH necessarily improve recovery capital—at least at the community level?

Strategic Considerations Continued	• Are there specific types of SDOH that may be more relevant to a discussion of recovery capital? • Are there broad psychosocial (or neurobiological) elements of recovery that are largely shared across cultures, age groups, etc.? • What specific roles do culture and cultural/social identity play in recovery, and how might our approaches to supporting recovery need to vary based on culture, social identity, and related factors such as age, gender, or sexual orientation? • What role does trauma, including adverse childhood experiences (ACE), play in not only the likelihood and potential severity of SUD, but in recovery needs and pathways?
Action Items/ Smaller-Scale Work	The ACE question above could be addressed, at least initially, through the kind of community studies run by Philippe Bourgois (University of California San Francisco) and Gabor Mate (Vancouver). Research question: Does the general public connect ACEs to SUD? Can that connection reframe SUD and people's experience with it to reduce stigma and self-stigma?

Action Panel I: Make Recovery Possible for More Americans: The Role of Government	

Strategic Considerations	Currently, the silo approach and categorical approach to funding reduces the ability of many people with SUD to get help. People with complex problems like SUD do not present in neat categories and generally need resources from multiple agencies.
	Develop a report assessing the current state of funding and operations and recommending policies, funding strategies, and demonstration projects to build stronger recovery ecosystems nationally. This can include cross-agency efforts with diverse stakeholders such as related tribal, state, and local agencies, law enforcement, the courts and criminal justice system, treatment providers, recovery community organizations, emergency management systems, the child welfare system, primary care, hospitals, schools, and employers.
	• In what ways do government policies and programs facilitate or impede recovery, including in relation to:
	  • The law enforcement and criminal justice sectors;
	  • Maternal and perinatal health and child welfare;
	  • Education, employment, and housing;
	  • Civil rights;
	  • Community development; and
	  • Prevention, harm reduction, treatment, recovery support access, funding, policies, and regulations?
	• What unique levers impacting such factors are controlled by executive branch agencies, legislatures, and courts at the federal, state, local, and tribal levels?
	• What strategies are likely to be effective in eliciting positive change in key government policies pertinent to making recovery possible for more Americans?

Action Items/ Smaller-Scale Work	Challenge: Treatment centers dominate the online search-engine recovery space for most Americans. There are organizations that collect databases/ information, etc. on recovery, but if you don't know to look for them, you might not find them. For example, Faces & Voices of Recovery has a lot of helpful information on recovery resources, but the average person may not know to look for this website. Can the government make an impact, either through funding or through fostering coordination between state drug control offices and national and state-level nonprofits etc.?

Action Panel II: Make Recovery Possible for More Americans: The Role of Non-Governmental Agencies (NGA)	
Strategic Considerations	The government cannot achieve the Office of National Drug Control Policy (ONDCP) goals without private-sector engagement but can convene, advance research, modify policies, fund pilots and service systems, and encourage private philanthropy to support community nonprofit services in the recovery space. Convene a White House conference to engage the private sector to determine the role and responsibilities of businesses, community-based organizations, the organized recovery community, philanthropy, and standard-setting organizations (e.g., joint commission, state and medical boards) in supporting recovery and recovery research. • What is the role of the organized recovery community in: • Educating legislators and other policy makers and advocating for policies and programs that support people in recovery? • Educating the public? • Stigma reduction? • Providing individual services? • Providing community-level services? • Building recovery capital and/or addressing SDOH? • Linking to or embedding in formal systems and services (e.g., law enforcement, the criminal justice systems, health insurance, SUD treatment and other health services,

Action Panel III: Eliminate Barriers and Increase Opportunities	
Strategic Considerations	We do not have current and relevant data that addresses the effects of untreated SUD on our economy, including the impact of increased loss of life (one person dies every 5 minutes) or the economic gain of redirecting 23 million people in pro-social ways. Review current relevant data, update and /or create new economic models to understand both the real costs of untreated SUD and the potential gain if those using substances achieve sustained recovery. Particular attention must focus on the impact of SUD on a generation of youth. • We have a good sense of the barriers to recovery from a legal and policy perspective and a growing understanding of barriers associated with stigma as well as of the relationship between stigma and punitive, exclusionary policies.

Strategic Considerations Continued	However, it appears we have yet to quantify those barriers. For example, we may not know how many people are affected by specific barriers, such as certain collateral consequences of conviction, and how much that costs our nation: • To what extent can we quantify the costs/impacts of various barriers? • How important is quantifying these barriers to make the case for policy change? • Can we estimate the impact of certain stigma-reduction efforts? • What do we know about the factors associated with effective policy change in this arena and in the broader civil rights and disability law contexts? • What do we need to learn and what research approaches, if any, might help inform such efforts? • What do we know about the social, cultural, and policy barriers to recovery-oriented policies in schools and workplaces? • Are there strategies that have been shown to be effective in addressing such barriers? • Are there nations, cultures, communities, state or substate governments, or organizations that have presented fewer barriers to recovery and/or proactively supported recovery? If so, are there characteristics or factors associated with these that are translatable into action by people, governments or organizations?

Strategic Considerations	Expand the AmeriCorps Recovery Corps program to support the infrastructure of community-based recovery organizations and increase access to recovery coaching.
Action Items/ Smaller-Scale Work	What kinds of data are being gathered about the impact of SUD on a generation of youth?

Action Panel IV: The Role of the Press in Eliminating Stigma and the Law in Eliminating Discrimination	
Strategic Considerations	Research shows that stigmatizing labels/framing affect perceptions and judgments and suggests that stigmatizing language increased in public communications between 2008 and 2015. At the same time, editors of peer-reviewed journals in the substance use field have called for an end to stigmatizing language and the Associated Press's style guide now calls for use of non-stigmatizing language. Both the terminology used in media and the framing of issues are crucial since public perceptions are influenced by stigma and associated stereotypes. There are indications that, in recent years, the opioid crisis has created a shift in public opinion about SUD, with greater understanding of SUD as a medical condition and more focus on treatment rather than merely punishment. One such indication of this shift is the growth of SUD recovery support undertaken by faith communities across the nation. The time may be right for the government, businesses, philanthropy, and the media to engage in a coordinated effort to address this epidemic using similar language that they have used for other health crises such as COVID, HIV, and smoking in the past.

Strategic Considerations Continued	• How were the shifts in language regarding other chronic conditions and disabilities accomplished? Do these changes offer insights?
	• While it is not the media's role to solve the problem of substance use stigma, it does have a role in using clear, unbiased, and fact-based language in news and analysis.
	  • How might journalists and stigma researchers, working together, recommend addressing this problem?
	  • To what extent is continued use of stigmatizing language by government (e.g., "abuse" used in names of agencies or "misuse" and "abuse" used in FDA categories of prescription medicine) a factor in language used by press?

Action Items/ Smaller-Scale Work	It is important for journalists and stigma researchers to work together. Can we draw lessons from HIV?

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