

New Report on Applying the Highly Successful Physicians and Pilots Treatment Programs to Other Groups

As many readers may know, programs for impaired physicians and pilots have excellent success rates and few relapses:

- 78% of physicians with continuous abstinence five years after treatment.¹
- 89% of pilots with continuous abstinence two years after treatment

These programs set the standard for treatment and their protocols are now being applied to other population groups to improve outcomes. A new report describes these efforts:

The New Paradigm for Recovery

Making Recovery – and Not Relapse – the Expected Outcome of Addiction Treatment

Issued by the **Institute for Behavior and Health**, the report identifies groups actively implementing components of the physician/pilot program as part of aftercare at treatment centers, in the criminal justice system, or for target groups, such as attorneys, beneficiaries and the affluent. See [page 20-21](#) for information about our contribution to these efforts.

Chaired by **Robert L. DuPont, MD**, with input from an impressive group of respected addiction psychiatrists and other clinically trained specialists, the report describes the *new paradigm* and factors contributing to its success, as well as definitions of *addiction, treatment, recovery and recovery support*:

- These definitions provide a sound, clinically supported foundation for any discussion of alcoholism and drug addiction.

The definitions will clear up misinformation and confusion among the general public and families seeking help regarding use of these terms from a professional perspective.

The report is long – 32 pages - but the preface and introduction are easily absorbed and the detailed table of contents allows for identification of areas of interest to the reader. Given the near universality of relapse after treatment for groups other than physicians and pilots, I highly recommended reading all 32 pages for professionals and family members with a loved one struggling with addiction.

Bill Messinger

¹ Based on clean alcohol and drug tests.

The New Paradigm for Recovery

Making Recovery – and Not Relapse – the Expected Outcome of Addiction Treatment

PHPs set the standard for long-term outcomes of individuals with substance use disorders. The first national study of the PHPs showed that the majority of participants had excellent long-term outcomes and few relapses.⁴³ Among physicians monitored for five years following treatment, 78% never had a positive test for alcohol or drugs.⁴⁴ Of participants who tested positive, two thirds had only one positive test over this prolonged period of monitoring. (Report, page 16)

From inception through July 2008, over 4,200 pilots were successfully monitored and returned to flight, with an average of 120 pilots identified, treated and return to work each year.⁵³ HIMS has a long-term success rate of nearly 90%.⁵⁴(Report, page 18)

A Report of the John P. McGovern Symposium

Hosted by the Institute for Behavior and Health, Inc.

November 18, 2013, Washington, DC

March 2014

Table of Contents

Preface.....	1
Recovery Management Working Group	1
Introduction	2
Treatment of Substance Use Disorders	4
The Near-Universality of Relapse	6
Defining Addiction, Treatment and Recovery	7
<i>A. Addiction</i>	7
<i>B. Treatment</i>	8
<i>C. Recovery</i>	10
<i>D. The Role of Recovery Support</i>	11
The New Paradigm for Recovery	12
Current Applications of the New Paradigm in Private Settings.....	15
<i>A. Monitoring by Organizations of Professionals</i>	15
1. Physicians.....	15
2. Nurses.....	16
3. Commercial Airline Pilots	17
4. Lawyers.....	18
<i>B. Addiction Treatment Programs</i>	18
1. Caron Recovery Network’s My First Year of Recovery.....	18
2. Livengrin Foundation’s Treatment and Recovery Engagement and Coordination.....	19
<i>C. Independent Monitoring Programs</i>	20
1. RecoveryAssurance	20
2. Messenger Advisors	20
3. O’Connor Professional Group.....	21
4. Post Treatment Supervision	21
Current Applications of the New Paradigm in the Public, State and Federally Funded Settings. 21	
<i>A. Criminal Justice System Programs</i>	22
1. HOPE Probation	22
2. Drug Courts.....	22
3. 24/7 Sobriety Project.....	23
Future Applications of the New Paradigm	23
Ethics of the New Paradigm.....	24
<i>A. Appropriate Leverage, Reward and Contingency</i>	25
Factors that Contribute to the Success of the New Paradigm	26
<i>A. Coordinated Support and Case Management</i>	26
<i>B. Drug and Alcohol Testing Technology</i>	26
<i>C. Recovery Support</i>	27
<i>D. Measuring Outcomes</i>	28
Research Opportunities	28
Implementation of the New Paradigm in the Context of Today’s Health Care Industry	30
Conclusions	32

Preface

On November 18, 2013 the Institute for Behavior and Health, Inc. hosted a one-day symposium in Washington, DC of thought leaders that had expertise in addiction treatment, research, public policy, and drug and alcohol testing technology. At the meeting the group established a community of interest, the Recovery Management Working Group, to promote the *New Paradigm for Recovery*, a new strategy of care management to dramatically reduce relapse and to foster lifetime recovery. Following the meeting additional interested experts were recruited to join with the original members to create this comprehensive report. Their goal is to help people suffering from substance use disorders achieve lasting recovery.

Recovery Management Working Group

Chair: Robert L. DuPont, MD, Institute for Behavior and Health, Inc.

Report Editor: Corinne L. Shea, MA, Institute for Behavior and Health, Inc.

The following members of the Recovery Management Working Group participated in the development of this Report. They are listed in alphabetical order. (*) denotes participation in the November 18, 2013 symposium.

Louis E. Baxter, MD, Professional Assistance Program of New Jersey, Inc.

Monica Demitor*, RiverMend Health

Caroline DuPont, MD*, Institute for Behavior and Health, Inc.

Helen DuPont*, Institute for Behavior and Health, Inc.

Neil Fortner, MS, FTS-ABFT, TC-NRCC, D-ACFE*, Drug and Alcohol Testing Industry Association; Alere

Stuart Gitlow, MD, MPH, MBA, American Society of Addiction Medicine

Mark S. Gold, MD, University of Florida College of Medicine

Jessica Hansford, MA, Livengrin Foundation

Jamie Huysman, PsyD*, WellMed Medical Management, Inc.

Brad Keays*, Soberlink, Inc.

John F. Kelly, PhD*, Massachusetts General Hospital; Harvard Medical School

Wendy Kimball, LPC, CEAP,* RecoveryAssurance

Cheryl D. Knepper, MA, LPC, ICCDP, ATR-BC, CSAT-S*, Caron Treatment Centers

Carol McDaid*, Capitol Decisions

Bill Messinger, JD, LADC,* Messinger Advisors, LLC

Shane Moes, MA, Livegrin

Arden O'Connor*, O'Connor Professional Group

Patrick O'Connor, MD, MPH, Yale University School of Medicine; Yale-New Haven Hospital

Ginger Phillips, LMSW CEAP, SAP, RecoveryAssurance

Andy Rothman*, Soberlink, Inc.

Frank Scarpati, MD, Community Bridges, Inc.

Marvin D. Seppala, MD*, Hazelden

Gregory E. Skipper, MD*, Promises Treatment Centers

Michel A. Sucher, MD*, Greenberg & Sucher, P.C.; Community Bridges, Inc.

Scott Teitelbaum, MD*, University of Florida College of Medicine; Florida Recovery Center

Yukiko Washio, PhD*, Treatment Research Institute

William L. White, MA, Chestnut Health Systems

Introduction

The *New Paradigm for Recovery* is a new, practical and affordable strategy that makes long-term recovery, including abstinence from any alcohol or drug use, the *expected outcome* of addiction treatment. There is ample evidence for its effectiveness and extensive examples of its current applications. The *New Paradigm* is not a replacement for formal episodes of treatment for substance use disorders. It does not favor one form of treatment over others. Instead, **the *New Paradigm* focuses on managing the environment of the individual with a substance use disorder in which the decision to use or not use drugs and alcohol is made.**

Like the treatment and management of other chronic illnesses, the *New Paradigm* offers a system of care management for substance use disorders. The *New Paradigm* typically involves an initial assessment followed, when indicated, by formal episodes of treatment. A monitoring agreement is signed that is designed to help the individual achieve abstinence. Long-term monitoring of the individual, including drug and alcohol testing, is used to identify any use of alcohol or other drugs. When any substance use is detected or other failure of compliance with the monitoring agreement occurs, appropriate action is taken immediately to stop the use, in accordance with the agreement. The monitoring agreement provides leverage, or external motivation, to help the individual remain abstinent while changes in thinking and behaviors, or internal motivation, take place. In the *New Paradigm*, recovery—not relapse—is the expected outcome.

The *New Paradigm* care management strategy has been developed and refined over the past four decades by organizations responsible for monitoring individuals working in at-risk positions including physicians and other health professionals, airline pilots and, more recently, lawyers, and is producing remarkable long-term outcomes. Within the past decade an extension of the *New Paradigm* has produced similarly good long-term outcomes in the criminal justice system with dramatically different populations. In recent years, the *New Paradigm* has been extended to other settings and integrated into treatment programs as part of the discharge process.

The *New Paradigm for Recovery* builds on a well-established body of work to improve the way in which substance use disorders are managed, focusing on the long-term well-being of the individual and providing strong recovery support.¹ Although substance use disorders are widely recognized as chronic diseases, treatment is largely episodic. Applying a chronic disease framework to treatment for substance use disorders is well-conceived^{2 3} and progress on this front has been made.⁴ There has been

¹ This literature is vast and well-beyond the scope of this report; thus, the studies cited are provided as examples but do not reflect a review of the literature.

² McLellan, A. T. (2002). Have we evaluated addiction treatment correctly? Implications from a chronic care perspective. *Addiction, 97*(3), 249-252.

³ White, W. L., Boyle, M., & Loveland, D. (2002). Alcoholism/addiction as a chronic disease: From rhetoric to clinical reality. *Alcoholism Treatment Quarterly, 20*(3/4), 107-129.

⁴ Dennis, M., & Scott, C. K. (2007). Managing addiction as a chronic condition. *Addiction Science & Clinical Practice, 4*(1), 45-55.

recognition of the need for extended engagement with individuals following formal episodes of treatment.⁵ Similar to the continuing contact made with patients with other chronic illnesses to evaluate behavior and maintain health, addiction treatment programs can provide continuing contact with individuals after discharge. Evaluating the impact of such models of chronic care management is an important area of study for the treatment of substance use disorders.^{6 7 8}

The *New Paradigm* provides management of substance use disorders analogous to the current and routine care management of other chronic diseases such as diabetes and hypertension. These chronic illnesses are actively monitored by objective means (e.g. A1c levels for diabetes and blood pressure for hypertension). Providing routine active care management for substance use disorders in the model of the *New Paradigm* has important implications for its widespread use and future funding. What is different about the *New Paradigm* is the random nature of the testing and the consequences of a positive test result showing relapse to substance use. This definition of care management as medical monitoring is important for the medicalization of addiction and for the funding of recovery support as a medically necessary part of care.

This report suggests many opportunities for extending the *New Paradigm*. It describes its most valuable core elements and considers its costs and benefits.

The box below provides a succinct summary of the challenge facing the management of substance use disorders today and defines treatment and recovery in this report setting the stage for the *New Paradigm*:

⁵ Stout, R. L., Rubin, A., Zwick, W., Zywiak, W., & Bellino, L. (1999). Optimizing the cost-effectiveness of alcohol treatment: A rationale for extended case monitoring. *Addictive Behaviors, 24*(1), 17-35.

⁶ Blodgett, J.C., Maisel, N.C., Fuh, I.L., Wilbourne, P.L. & Finney, J. (2014) How effective is continuing care for substance use disorders? A meta-analytic review. *Journal of Substance Abuse Treatment, 46*(2), 87-97.

⁷ Saitz, R., et. al. (2013). Chronic care management for dependence on alcohol and other drugs: the AHEAD randomized trial. *JAMA, 310*(11), 1156-1167.

⁸ O'Connor, P. G. (2013). Managing substance dependence as a chronic disease: is the glass half full or half empty? *JAMA, 310*(11), 1132-1134.

The Challenge: Drugs have an unprecedented power to stimulate brain reward, which can in turn hijack the brain. Addicted thinking can confound free will and personal choice. This is precisely why others and the environment surrounding a person with a substance use disorder are crucial; exerting external support and accountability helps a drug using individual establish and sustain abstinence.

Treatment: The goal of addiction treatment is not merely to “cut down” the use of one drug. It is to stop all use of drugs and alcohol. Formal episodes of treatment are relatively brief. All begin with an admission date and end with a discharge date. Such episodes of treatment define the problem of addiction for an individual, help the individual problem solve, and help move the individual forward in the stages of behavior change, putting that person on the path to lifetime recovery. This report supports the use of treatment and, building on that base, similar to the management of other chronic illnesses, advocates for long-term care management of substance use disorders, in the model of the *New Paradigm*.

Recovery: In general medicine, recovery typically means regaining the health status that existed prior to the impact of the disease being treatment. In the New Paradigm, recovery has a specific meaning that grows out of the experience of the 12-step fellowships. Recovery in the context of substance use disorders means attaining a state that is better than the preexisting state of the individual prior to addiction. Recovery requires but is far more than abstinence from the use of alcohol and other drugs. Recovery includes healthy living, wellness, and productive engagement. It is not static but rather a dynamic state of continued character development and continual, diligent work to prevent relapse. For many, recovery is also a spiritual awakening, a calling to fulfill a meaningful destiny including helping others, especially helping suffering addicts and alcoholics.

Treatment of Substance Use Disorders

The treatment of substance use disorders in the United States has never been uniform. During the last half of the twentieth century, several types of treatment emerged that continue to this day, roughly defined by their funding sources, including private treatment program and publicly funded treatment programs. In addition to these types of programs, which can be widely disparate and idiosyncratic, a non-treatment, free resource for recovery, peer-based recovery support, is an essential contributor to addiction treatment. In the *New Paradigm*, these three responses to addiction are at once separate and interwoven.

The 12-Step programs, the best known of which is Alcoholics Anonymous (AA), are examples of these free resources for recovery. AA was co-cofounded by Dr. Bob Smith with Bill Wilson. The founding of AA is celebrated as the day in 1935 that Bill Wilson had his last drink. Formal adoption of the twelve

traditions occurred in 1950, followed by the publication in 1953 of the book, *Twelve Steps and Twelve Traditions*.

During the early decades following the founding of AA, there was a gradual integration between addiction treatment programs in the private sector and AA. In the early 1950s, a collaboration known as *The Minnesota Model* was established that married professional medical treatment with AA. In this model, 28 days of residential treatment was followed by lifetime participation in AA, and family members impacted by substance use were encouraged to attend Al-Anon meetings. The Minnesota Model “defined alcoholism as a primary, progressive disease whose resolution require lifelong abstinence; extolled the importance of treating the alcoholic and addict with dignity and respect; emphasized the importance of a mutually supportive treatment milieu; utilized a multi-disciplinary treatment team and a full continuum of services; and integrated the steps and social support of Alcoholics Anonymous during and following treatment.”⁹

The remarkable widespread availability of publicly-funded treatment in the United States began 1971 after President Richard Nixon called drugs, “America’s public enemy number one.”¹⁰ For the first time, the federal government provided significant funding for addiction treatment programs. This funding which was called *demand reduction* balanced funding for the traditional law enforcement approach which was termed *supply reduction*. Demand reduction focused on reducing drug use through a federal financial and programmatic commitment to treatment, prevention and research. Because these programs began in the context of a sudden and intense epidemic of heroin use, publicly-funded addiction treatment initially focused on the use of methadone to treat heroin dependence. Over the past four decades, a rich mix of public addiction treatment programs has flourished.¹¹ While some of these programs formally introduce addicted individuals to 12-step programs as part of the treatment protocol, the connection is not universally made.

While the need for addiction treatment today is enormous, treatment has remained underused. An estimated 23.1 million Americans were met DSM-IV criteria for substance use disorders because of their drug use in the past year but only 2.5 million received treatment through inpatient hospital stays, at substance use rehabilitation facilities, including inpatient and outpatient care, and at mental health care centers.¹²

⁹ White, W. (2003). Hazelden Foundation. In Blocker, J. and Tyrell, I., Eds. *Alcohol and Temperance in Modern History*. Santa Barbara, CA: ABC-CLIO, pp.290-291. Available:

<http://www.williamwhitepapers.com/pr/2003HazeldenHistory.pdf>

¹⁰ President Richard Nixon, Remarks About An Intensified Program for Drug Abuse Prevention and Control, June 17, 1971. The American Presidency Project. Available: <http://www.presidency.ucsb.edu/ws/?pid=3047>

¹¹ White, W. L. (1998). *Slaying the Dragon: The History of Addiction Treatment and Recovery in America*. Bloomington, IL: Chestnut Health Systems/Lighthouse Institute.

¹² Substance Abuse and Mental Health Services Administration. (2013). *Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-46, HHS Publication No. (SMA) 13-4795. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Importantly, among the 20.6 million Americans classified as in need of substance use disorder treatment but who did not receive it, the vast majority, 94.6%, did not think that they needed treatment.¹³ Of the 5.4% who thought they did need treatment, over two thirds did not make any effort to obtain treatment. These figures demonstrate a clear disconnect between substance use problems and seeking and obtaining treatment today. Moreover, given the significant health burden associated with alcohol and drug use, this disconnect strongly supports the role of others to engage in the identification of substance use disorders and provide intervention to assist individuals with substance use problems obtain treatment.¹⁴

The Near-Universality of Relapse

What happens when individuals with substance use disorders enter formal episodes of treatment? Data is not available from privately-funded programs, but half of the individuals that are admitted to publicly-funded programs successfully complete treatment. Discharge data show that of the 1.6 million discharges from publicly-funded treatment in 2008, 47% completed treatment and another 14% were transferred to further treatment.¹⁵ One quarter of discharges dropped out, 6% were terminated by the facility, 2% were incarcerated and 5% neglected to complete treatment for other reasons.¹⁶ One of the primary reasons many individuals do not complete an episode of treatment is because of administrative discharge, largely due to non-compliance with the program.¹⁷ There is support for treatment programs to revisit their administrative policies and consider using clinical alternatives to ensure that actions taken are in the best interest of patients.

Formal episodes of substance use disorder treatment are relatively brief, even though addiction is a life-long, chronic disorder. The median length of stay of individuals who completed treatment episodes in 2008 varied by type of care, ranging from four days for detoxification, to 124 days for outpatient treatment and 197 days for outpatient medication-assisted opioid therapy.

Whether or not an episode of treatment is completed, the large majority relapses to alcohol and drug use. Relapse after episodes of treatment is so common that it is often defined as a central element of this chronic disorder.

¹³ Substance Abuse and Mental Health Services Administration. (2013). *Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-46, HHS Publication No. (SMA) 13-4795. Rockville, MD: Substance Abuse and Mental Health Services Administration.

¹⁴ Although a detailed discussion is outside the scope of this paper, Screening, Brief Intervention and Referral to Treatment (SBIRT) is needed in many settings, including the areas of health care and within the criminal justice system.

¹⁵ Substance Abuse and Mental Health Services Administration (2010). Treatment Episode Data Set (TEDS): 2008. Discharges from Substance Abuse Treatment Services, DASIS Series: S-56, HHS Publication No. (SMA) 11-4628, Rockville, MD; Substance Abuse and Mental Health Services Administration.

¹⁶ These discharges include individuals who were discharged and readmitted.

¹⁷ White, W. L., Scott, C. K., Dennis, M. L., & Boyle, M. G. (2005). It's time to stop kicking people out of addiction treatment. *Counselor*, 6(2), 12-25.

Substance use disorders are costly. The social costs from the use of alcohol and drugs are estimated at \$600 billion each year.¹⁸ The National Institute on Drug Abuse (NIDA) conservatively estimates that “every dollar invested in addiction treatment programs yields a return of between \$4 and \$7 in reduced drug-related crime, criminal justice costs, and theft. When savings related to healthcare are included, total savings can exceed costs by a ratio of 12 to 1. Major savings to the individual and society also stem from fewer interpersonal conflicts; greater workplace productivity; and fewer drug-related accidents, including overdoses and deaths.”¹⁹

The United States spends an estimated \$28 billion annually in the treatment of addiction; and yet, this spending is much less than for other chronic diseases including diabetes (\$43.8 billion) and cancer (\$86.6 billion).²⁰ Given the changing landscape of health care in the United States, now is a prime opportunity to improve the long-term outcomes for individuals with substance use disorders by improving care provided by addiction treatment programs and providing extended care management.

Defining Addiction, Treatment and Recovery

A. Addiction

Addiction is a chronic disease that has been redefined over many years. The American Society of Addiction Medicine (ASAM) provides the following brief definition:²¹

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors. Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one’s behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.

¹⁸ National Institute on Drug Abuse (2012). Principles of Drug Addiction Treatment: A Research-Based Guide (3rd ed.). NIH Publication No. 12–4180. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse. p.13 Available: http://www.drugabuse.gov/sites/default/files/podat_1.pdf

¹⁹ National Institute on Drug Abuse (2012). Principles of Drug Addiction Treatment: A Research-Based Guide (3rd ed.). NIH Publication No. 12–4180. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse. p.13 Available: http://www.drugabuse.gov/sites/default/files/podat_1.pdf

²⁰ National Center on Addiction and Substance Abuse at Columbia University. (2012). Addiction Medicine: Closing the Gap Between Science and Practice. New York, NY: CASA Columbia. Available: <http://www.casacolumbia.org/upload/2012/20120626addictionmed.pdf>

²¹ American Society of Addiction Medicine. (2011, April 12). Public Policy Statement: Definition of Addiction. Chevy Chase, MD: ASAM. Available: <http://www.asam.org/advocacy/find-a-policy-statement/view-policy-statement/public-policy-statements/2011/12/15/the-definition-of-addiction>

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) published by the American Psychiatric Association broadened the scope of addiction diagnosis by using the singular term substance use disorder (rather than abuse and dependence), which is measured on a continuum of mild, moderate and severe.²²

The disease of addiction results from use of alcohol and other drugs. In many ways addiction is a disease of youth; the earlier the initiation of substance use, the more likely an individual will have later substance use problems, including addiction. However, the identification of substance use problems may be more difficult among young people because this population is generally relatively healthy. Typically only after a substantial amount of time are substance use problems identified and interventions provided. In addition to genetic risk for addiction, the normalization of drug and alcohol use is seductive and can bring people into the disease. Unhealthy patterns of drug and alcohol use warrant “stigma”, to warn others to avoid such behaviors and to help persons engaged in such behaviors identify the need for help. In itself, illegal drug use merits stigma. Such social disapproval relates specifically to stigmatizing the behavior and explicitly not the person. Moreover, there should not be stigma associated with attaining addiction treatment as has unfortunately been the case in particular for medication-assisted treatment.

B. Treatment

Some believe that obtaining one or more formal episodes of treatment resolves the problem of substance use disorders and that such treatment alone can lead to long-term recovery. Within this context, the principal public health goal is for individuals with substance use disorders to get into treatment and to stay in treatment for long periods of time. In general, research shows that longer periods of treatment produce better outcomes,²³ but this short formula sidesteps two important questions: the first is what happens inside the black box of treatment, and the second is what happens when the patient leaves treatment.

What constitutes treatment of addiction? Treatment often includes education about the disease to help the individual fully recognize the extent of the substance use disorder, including related problems, provides structure that promotes healthy living, exposure to peer-based recovery self-help groups, counseling and strategies for relapse prevention and with medication-assisted treatment, the use of a prescribed medication.. Drugs such as naltrexone and antabuse are used to treat alcohol disorders and naltrexone, methadone and buprenorphine are used to treat opioid disorders. However, all of these strategies on their own are often no match for the powerful forces of addiction. This is because drugs hijack the brain’s thinking and change the brain over time in persons with substance use disorders. The prevalence of relapses, even a long time after completing a formal episode of treatment, demonstrates

²² Diagnostic and Statistical Manual of Mental Disorders, fifth edition.

²³ National Institute on Drug Abuse. (2012). Principles of Drug Addiction Treatment: A Research-Based Guide (3rd edition). NIH Publication No. 12–4180. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse. Available: http://www.drugabuse.gov/sites/default/files/podat_1.pdf

that these brain changes are long-lasting, and that maintaining the motivational shifts that aids early abstinence and recovery is difficult to sustain over the long-term.

How, then, is treatment success best defined and measured? The differences in orientation among addiction treatment programs reveal the complexity of this question. For some treatment programs, success is measured in the reduction of substance use, or in their safer use; for others, success requires abstinence from all use of alcohol and other drugs. No matter the orientation of the treatment program, success is usually measured during the brief formal episode of care of treatment, typically days, weeks or months and rarely, years.

Treatment success is often measured in terms that are substance-specific and time-specific. For example, in medication-assisted treatment, the typical measurement of success is in the reduction of the use of opiates by patients while they take medications such as methadone, buprenorphine or naltrexone. An extensive review of the literature shows there is “clear clinical evidence of effectiveness in reducing opioid use and opioid use-related symptoms of withdrawal and craving as well as risk of infectious diseases and crime – during the time of active medication but not following medication cessation.”²⁴ This approach to defining treatment success does not address the harmful use of alcohol and the nonmedical use of non-opioid drugs, which are commonly used by opiate-dependent patients, even though some opioid treatment programs do address other substance use. Further, this approach assumes that the duration of the medication use is similar to the use of insulin by diabetics – that is for life. In reality, like other forms of addiction treatment, episodes of medication-assisted treatment are brief. Patients in medication-assisted treatment typically remain so for a number of months with relatively few remaining for five years or longer. The majority of patients discontinue the use of medication following episodes of treatment and their subsequent relapse to opiate use is all but universal.

Medication-assisted treatment is effective and useful as part of a comprehensive, recovery-oriented program in substance use treatment. Completion rates for medication-assisted treatment and patient outcomes during treatment for opioid disorders are better than treatment for opioid disorders that do not include the use of such medications. **No matter the form of treatment provided for any substance use disorder, relapse after treatment is common.**

Many treatment programs of various philosophies do not use random drug testing to determine whether patients are continuing to use drugs and/or alcohol. If programs do use testing, it is usually for a limited range of drugs; for example, treatment programs may purposely omit testing for marijuana (cannabis), or do scheduled drug testing. Evidence of other drug and/or alcohol use may not be collected (untested) or may simply be ignored when it is detected. The length of stay of patients in abstinence-oriented programs, the most prevalent treatment programs, is usually shorter than the length of treatment stays among medication-assisted programs. What happens to those patients when

²⁴ Chalk, M., Alanis-Hirsch, K., Woodworth, A., Kemp, J., & McLellan, A. T. (2013). FDA Approved Medications for the Treatment of Opiate Dependence: Literature Reviews on Effectiveness and Cost-Effectiveness. Philadelphia, PA: Treatment Research Institute.

they leave treatment? All substance use disorder treatment programs, whether abstinence-based or medication-assisted, need to focus during treatment on the use of alcohol and other drugs, and all treatment programs need to extend their focus beyond discharge to what happens to patients after they leave formal episodes of treatment.

C. Recovery

Attaining recovery in the context of substance use disorders is the goal of managing the symptoms of this chronic illness. Addiction is modern chemical slavery; recovery is modern emancipation. There are many definitions of recovery but the two favored in this report are from the Betty Ford Institute and the American Society of Addiction Medicine (ASAM). In 2007 the Betty Ford Institute convened a broadly representative group of experts to define the concept of recovery. In a landmark article they defined recovery as “a voluntarily maintained lifestyle characterized by sobriety, personal health, and citizenship.”²⁵ ASAM defined recovery as “a process of sustained action that addresses the biological, psychological, social, and spiritual disturbances inherent in addiction. This effort is in the direction of a consistent pursuit of abstinence, addressing impairment in behavioral control, dealing with cravings, recognizing problems in one’s behaviors and interpersonal relationships, and dealing more effectively with emotional responses. Recovery actions lead to reversal of negative, self-defeating internal processes and behaviors, allowing healing of relationships with self and others. The concepts of humility, acceptance, and surrender are useful in this process.”²⁶ Examples of other recovery behaviors include self-disclosure, asking for help, honesty, empathy, trust, and forgiveness.

The key feature of both definitions of recovery is that for people suffering from substance use disorders, recovery requires long-term abstinence from the use of alcohol and other drugs, most often for life. This is because substance use disorders are life-long. The vast majority of people who consider themselves to be in recovery consider abstinence from the use of alcohol and other drugs as a defining element of recovery.²⁷ However, recovery is more than abstinence. Recovery includes healthy living, wellness, and productive engagement. Recovery is not static but rather a dynamic state of continued character development and diligent work to prevent relapse. Recovery initiation and maintenance can be achieved for some with or without treatment as well as with or without medication support.

The crucial element in securing enduring recovery and preventing relapse among individuals with substance use disorders is not simply formal episodes of treatment. Subtle shifts in thinking, attitudes, emotion, and behavior precede relapse.²⁸ Given the near-ubiquity of relapse, providing extended care management (outside a specific episode of treatment) presents a unique opportunity to help the

²⁵ Betty Ford Institute Consensus Panel. (2007). What is recovery? A working definition from the Betty Ford Institute. *Journal of Substance Abuse Treatment*, 33(3), 221-228.

²⁶ American Society of Addiction Medicine. (1982, February 1). State of Recovery. Public Policy Statement on the State of Recovery. Available: <http://www.asam.org/advocacy/find-a-policy-statement/view-policy-statement/public-policy-statements/2011/12/16/state-of-recovery>

²⁷ Laudet, A. B. (2007). What does recovery mean to you? Lessons from the recovery experience for research and practice. *Journal of Substance Abuse Treatment*, 33(3), 243-256.

²⁸ Gorski, T. T., & Miller, M. (1982). *Counseling for Relapse Prevention*. Independence, MO: Herald Publishing House.

individual maintain abstinence, in particular through the management of the environment in which the decision is made to use or not to use alcohol and other drugs.

D. The Role of Recovery Support

In most cases, while a patient is in a formal episode of treatment, it is essential to provide a source of long-term external support for recovery. For the long haul, the commitment to recovery, ideally abstinence from alcohol and drug use, needs to become a personal goal for the individual. There must be a conversion from addicted-thinking to recovery-thinking for the benefits of treatment to be realized. One of the primary roles of treatment is to begin this process of healing and to educate patients about the ever-present life-long risk of relapse. Good treatment does more than educate; it also connects patients to recovery support as part of the treatment experience. Today there exists a broad spectrum of spiritual, religious and secular mutual aid recovery programs in which many individuals discharged from treatment programs find continuing care.

One of the largest sources of mutual aid recovery support is the 12-step fellowships of Alcoholics Anonymous and Narcotics Anonymous. The 12-steps “are a group of principles, spiritual in their nature, which, if practiced as a way of life, can expel the obsession to drink [or use drugs] and enable the sufferer to become happily and usefully whole.”²⁹ These, unlike treatment and care management, are oriented to lifetime participation, free of financial costs, and available almost everywhere. Some people in stable long-term recovery stop attending meetings. There is, however, a deep wisdom within these fellowships that recognizes cessation of meeting participation as hazardous. As *Alcoholics Anonymous*, widely known as “The Big Book”, states, “[we] alcoholics are men and women who have lost the ability to control our drinking. We know that no real alcoholic ever recovers control. All of us felt at times that we were regaining control, but such intervals—usually brief—were inevitably followed by still less control, which led in time to pitiful and incomprehensible demoralization. We are convinced to a man that alcoholics of our type are in the grip of a progressive illness. Over any considerable period we get worse, never better.”³⁰ The use of 12-step fellowships is a common support provided to individuals with substance use disorders in the *New Paradigm*. Voluntary participation in AA has also been identified as a cost-effective strategy for caring for this population.³¹

There has been an emergence of recovery support institutions beyond mutual aid groups that could also be well-integrated into long-term recovery support protocols.³² Sources for recovery support include but are not limited to recovery housing, recovery schools, recovery industries, recovery ministries, recovery cafes, and recovery sports organizations. Further, access to stable housing and stable employment, on which some recovery programs and services specifically focus on providing, are

²⁹ *Twelve Steps and Twelve Traditions*. (2008) New York, NY: Alcoholics Anonymous World Services, Inc. p.15

³⁰ *Alcoholics Anonymous*. (2001). New York, NY: Alcoholics Anonymous World Services, Inc. p. 30.

³¹ Humphreys, K., & Moos, R. H. (1996). Reduced substance-abuse-related health care costs among voluntary participants in Alcoholics Anonymous. *Psychiatric Services*, 47, 709-713.

³² White, W., Kelly, J., & Roth, J. (2012). New addiction recovery support institutions: Mobilizing support beyond professional addiction treatment and recovery mutual aid. *Journal of Groups in Addiction & Recovery*, 7(2-3), 297-313.

examples of important elements that assist people in maintaining their recovery. The various recovery-based services available today can serve and support all individuals with substance use disorders for extended periods of time, including a lifetime.

The *New Paradigm* supports the concept of recovery management which has been described as “a philosophy of organizing treatment and recovery supports to enhance early engagement, recovery initiation and maintenance, and the quality of personal/family life in the long-term.”³³ Like other types of continuing care management, assertive recovery monitoring and recovery management check-ups have been established to improve outcomes and provide cost-savings.^{34 35 36 37}

The New Paradigm for Recovery

The *New Paradigm for Recovery* is a system of long-term care management. The *New Paradigm* manages the environment in which the decision is made to use or not to use alcohol and drug use. Its goal is to make recovery a reality for far more people leaving episodes of formal substance use disorder treatment. This management system is sustained for many years, like the care management for other chronic illnesses.

The shift in focus from episodes of treatment to the long-term management of the environment of the addict is important because the rewards of alcohol and drug use are immediate, concentrated, and predictable, but that ceases to be the case as the disease progresses. The rewards of abstinence, and long-term recovery, are delayed, and uncertain to those not in recovery. Furthermore, among addicted individuals, there is an inherent strong cognitive bias toward immediate reward, and a discounting of future rewards, even though such rewards may be larger in magnitude.³⁸ This means that even when others involved with an addicted person advise against use and offer strong and compassionate support for abstinence, they find they have limited authority and power. The addict commonly relapses impulsively, compulsively, and in hiding. It may be a long time before relapse to alcohol and drug use is detected. Then the response to relapse is typically to return the addicted person to treatment, which

³³ Kelly, J., & White, W. L. (Eds., 2011). *Addiction recovery management: Theory, science and practice*. New York: Springer Science.

³⁴ Godley, M. D., Godley, S. H., Dennis, M. L., Funk, R. R., & Passetti, L. L. (2007). The effect of assertive continuing care on continuing care linkage, adherence, and abstinence following residential treatment for adolescent substance use disorders. *Addiction*, 102, 81-93.

³⁵ Stanford, M., Banerjee, K. & Garner, R. (2010). Chronic care and addictions treatment: A feasibility study on the implementation of posttreatment continuing recovery monitoring. *Journal of Psychoactive Drugs*, SARC Supplement 6, September, 295-302.

³⁶ McCollister, K. E., French, M. T., Freitas, D. M., Dennis, M. L., Scott, C. K., & Funk, R. R. (2013). Cost-effectiveness analysis of Recovery Management Checkups (RMC) for adults with chronic substance use disorders: evidence from a 4-year randomized trial. *Addiction*, 108(12), 2166-2174.

³⁷ McCollister, K.E., French, M.T., Freitas, D.M., Dennis, M.L., Scott, C.K., & Funk, R.R. (2013). Cost-Effectiveness analysis of Recovery Management Checkups (RMC) for adults with chronic substance use disorders: evidence from a four-year randomized trial, *Addiction*, 108, 2166-2174.

³⁸ Bickel, W. K., & Marsch, L. A. (2001). Toward a behavioral economic understanding of drug dependence: delay discounting processes. *Addiction*, 96(1), 73-86.

can be a difficult and expensive struggle. Once the crisis subsides and the addict regains some measure of control, the addict leaves formal episodes of treatment, once again to try to manage the problem independently.

The cycle in and out of episodes of treatment is often considered an inherent part of an addict's struggle with a substance use disorder. It is well-accepted that treatment can be successful, at least for a time. If the gains of primary treatment can be reinforced over a long period of time, then the scales are tipped away from returning to use and toward long-term recovery. When that shift occurs, recovery is the expected outcome of treatment, not relapse.

To manage the environment in which the decision is made to use or not to use substance, the *New Paradigm* begins with a signed mutual agreement between the individual and the supervising entity (for example with a family, an employer, or legal authority) to abstain from alcohol and drugs. This is best completed at the time of initial formal treatment engagement, following the personal, domestic, or legal crisis that has precipitated the treatment intervention, and when the individual's motivation for change is most likely to be at its highest. Typically the agreement is signed by both parties as part of or after successful completion and discharge from treatment through the use of a supportive care management structure. **The individual is subject to frequent random drug and alcohol testing to quickly identify any relapse for an extended period of time, commonly many years. Relapse and any missed alcohol or drug tests are met with known, swift and certain responses.** The monitoring agreement provides leverage, creating incentives for the individual to comply with recommendations of qualified treatment professionals. **Individuals with substance use disorders are strongly encouraged, or even required, to engage in community-based support meetings.** For the vast majority of individuals, this means participation in the 12-step fellowships of AA and NA. Through the care management process, individuals obtain a sponsor and work the 12-steps, with meetings reinforcing and sustaining the work recovery that was begun in treatment. By maintaining abstinence and complying with the monitoring agreement, the individual benefits directly

The *New Paradigm* is an accountable system of care management. Leaving recovery decisions to the addicted person means (for many), abandoning that person to the power of the addicted brain. In contrast, active care management helps individuals abstain from substance use by holding them accountable for their decisions, thus keeping them on the path toward recovery. This system of care management must be prolonged precisely because the risk to relapse is life-long.

Within an individual with a substance use disorder lies two different people: the person when using and the person when in recovery. When the individual is using, the substance use hijacks that person's brain reward and minimizes and denies the negative consequences of use. When the individual is drug- and alcohol-free, that person sees and even magnifies the losses in perspective from the substance use and experiences and even celebrates the benefits of being abstinent. The strategy of the *New Paradigm* is to enhance accountability by providing care management through monitoring and consequences in dealing with that first person in order to reveal and sustain the second person. The consequences are clear, and agreed upon in advance by the addicted individual and those providing the recovery monitoring. This is

a process that takes not days or weeks but months and years and is an important part of the path to long-term recovery.

Not every alcohol or drug user needs the complex, long-term care management of the *New Paradigm*.

Many people with serious problems resulting from their alcohol and drug use respond to advice from family, friends and health care professionals to cut down or to stop their use of alcohol and other drugs. Many individuals do well in treatment and successfully achieve abstinence and recovery on their own or with support from others. Moreover, the wide array of recovery programs and related support can provide many individuals with the tools they need. It is important to respect this truth and to encourage such individuals to continue on their path to recovery.

The *New Paradigm* specifically responds to the needs of people who are not deterred from use by simpler interventions or who have not successfully engaged in recovery mutual aid support. **The *New Paradigm* is best for people who have failed at treatment, for those who may not succeed in 12-step mutual aid recovery support, for those whose substance use has disrupted their lives, and for people whose lives, including their jobs, require a guarantee of abstinence. However, the strategies of the *New Paradigm* are flexible and also can help individuals at lower risk of relapse.** The concepts of the *New Paradigm* can be used universally to shift the balance of decision-making toward lasting recovery and away from relapse. For low-risk patients, rather than entering an expensive and complex program of recovery support, the most practical approach is to find elements of the *New Paradigm* that are affordable and easily implemented based on individual need. The *New Paradigm* should always include random drug testing.

The aggressive and comprehensive strategies of the *New Paradigm* can be undermined by a common, understandable and even noble attitude among families and friends to respect the wishes and actions of the addicted individual. Their philosophy is often to support and encourage but not to direct or to control the individual; to be endlessly patient and respectful, even when the individual's choices are reckless and perhaps life-threatening, until and unless the individual decides to recover. When facing addiction of a loved one, many people find it easy to enable ongoing substance use without realizing that they are doing so. Many peer-based support groups for families impacted by addiction, including Al Anon, stress the need for a "compassionate detachment" in which families separate themselves from the individual's substance use disorder and related problems.

The *New Paradigm* is dramatically different from detached "tough love." With the *New Paradigm* there is strong engagement, not detachment. This approach encourages a clear-eyed calculation of the addicted person's interests. The *New Paradigm's* philosophy encourages direct, consistent engagement, support and reinforcement, holding the individual accountable with meaningful consequences and rewards. Family members, friends, employers, health care professionals, legal advisors and correctional agents as well as most people who know of the individual's substance use disorder potentially are members of the support group of those suffering from a substance use disorder. The engagement of others in the support of the individual is an important part of the *New Paradigm*.

Current Applications of the New Paradigm in Private Settings

A. Monitoring by Organizations of Professionals

Professional organizations first adopted monitoring programs for their members that were suffering from substance use problems who were working in safety-sensitive positions. Subsequently and not surprisingly, many of the individuals who developed the professional monitoring programs of the *New Paradigm* were, themselves, in long-term recovery.

Although monitoring for compliance is conducted for other chronic illnesses, such as diabetes and hypertension, the monitoring of substance use disorders by organizations of professionals is unique in that it is mandatory, intensive and prolonged. Unlike other chronic disease monitoring programs, in these substance use disorder monitoring programs, there are serious consequences imposed for non-compliance.

1. Physicians. The physician health movement began in the early 1970s. An article published in the *Journal of the American Medical Association* in 1973 entitled, “The Sick Physician”³⁹ for the first time documented the prevalence of substance use disorders among physicians. The American Medical Association (AMA) encouraged state medical boards to take action to help physicians with substance use disorders. Physician health programs (PHPs) were created as clinical arms to manage the population of their membership that had documented serious substance use problems.

Many leaders of the PHP movement were – and are today – in recovery, meaning that they were diagnosed with substance use disorders and worked their way into solid recovery over the course of many years. Their experiences guided the development of the PHP model, which largely provided the basis for the *New Paradigm*. Virtually without exception, these founding physicians in recovery were active in the 12-step fellowships of AA and NA, and most had found their way into recovery only after the forceful intervention of family members and professional colleagues – including medical licensing boards. One early PHP leader described the process of intervention and monitoring as being “a two-by-four to the head, not once but repeatedly, to get the attention of addicted doctors.”⁴⁰

Physicians referred to their state PHP are evaluated for substance use disorders as well as mental health disorders and comorbid conditions. Following evaluation, the PHP oversees and manages the treatment, long-term monitoring and advocacy of the participants, for a period of five years or longer. A monitoring contract is signed, holding the participants to the standards of the PHP including abstinence from alcohol and drugs, with immediate and serious consequences for non-compliance. When indicated, participants are referred to appropriate treatment for substance use disorders and for any other comorbid conditions.⁴¹ Leaving the PHP program or relapse to substance use means the risk to the

³⁹ The sick physician. Impairment by psychiatric disorders, including alcoholism and drug dependence. (1973). *JAMA*, 223(6), 684-687.

⁴⁰ Quote from November 18, 2013 symposium.

⁴¹ DuPont, R. L., McLellan, A. T., Carr, G., Gendel, M & Skipper, G. E. (2009). How are addicted physicians treated? A national survey of physician health programs. *Journal of Substance Abuse Treatment*, 37, 1-7.

physician of loss of the license to practice medicine, as physicians are accountable to their state medical boards. A national study of PHPs showed that of physicians whose treatment was documented, 78% participated in residential or intensive outpatient day treatment lasting between 30 and 90 days (with an average of 72 days).⁴² Physicians commonly participated in outpatient treatment for two to 12 additional months and typically were removed from medical practice during that time. Upon discharge, participants were closely monitored, most commonly for periods of five years or longer. Participants were subject to frequent random drug and alcohol testing. Active attendance in community-based recovery support groups, most commonly AA and NA meetings, was required. As a part of the process, PHPs served as advocates for participants and informed the physicians' communities that they were doing well in the program, and supported their return to medical practice.

PHPs set the standard for long-term outcomes of individuals with substance use disorders. The first national study of the PHPs showed that the majority of participants had excellent long-term outcomes and few relapses.⁴³ Among physicians monitored for five years following treatment, 78% never had a positive test for alcohol or drugs.⁴⁴ Of participants who tested positive, two thirds had only one positive test over this prolonged period of monitoring.

Subsequent research focused on physician specialties has shown that both surgeons and anesthesiologists have the same good outcomes as their peers.^{45 46} The national PHP data continues to be used today.

2. Nurses. While many PHPs monitor other health professionals, other professional monitoring programs also exist specifically for nurses. Approximately 250,000 nurses suffer from substance use disorders.⁴⁷ Nurses with substance use disorders are referred to alternative-to-discipline programs (ATD), a very similar approach to the PHP.

The Intervention Project for Nurses, the first program for nurses with substance use disorders modeled after Employee Assistance Programs (EAPs), started in Florida in 1983. Nurses are considered the largest group of health care professionals; however, sanctions against them for substance use problems can be more stringent than physicians.⁴⁸ The 2010 National Council of State Boards of Nursing (NCSBN)

⁴² DuPont R. L., McLellan A. T., White W. L., Merlo L., and Gold M. S. (2009). Setting the standard for recovery: Physicians Health Programs evaluation review. *Journal for Substance Abuse Treatment*, 36(2), 159-171.

⁴³ McLellan, A. T., Skipper, G. E., Campbell, M. G. & DuPont, R. L. (2008). Five year outcomes in a cohort study of physicians treated for substance use disorders in the United States. *British Medical Journal*, 337:a2038.

⁴⁴ DuPont R. L., McLellan A. T., White W. L., Merlo L., and Gold M. S. (2009). Setting the standard for recovery: Physicians Health Programs evaluation review. *Journal for Substance Abuse Treatment*, 36(2), 159-171.

⁴⁵ Buhl, A., Oreskovich, M. R., Meredith, C. W., Campbell, M. D., & DuPont, R. L. (2011). Prognosis for the recovery of surgeons from chemical dependency. *Archives of Surgery*, 146(11), 1286-1291.

⁴⁶ Skipper, G. E., Campbell, M. D. & DuPont, R. L. (2009). Anesthesiologists with substance use disorders: A 5-year outcome study from 16 state Physician Health Programs. *Anesthesia & Analgesia*, 109(3), 891-896.

⁴⁷ Fogger, S., & McGuinness, T. (2009). Alabama's Nurse Monitoring Programs: A Study of Program Satisfaction. *Journal of Addictions Nursing*, 20(3), 142-149.

⁴⁸ Shaw, M. F., McGovern, M. P., Angres, D. H., and Rawal, P. (2004). Physicians and nurses with substance use disorders. *Nursing and Health Care Management and Policy*, 47(5), 561-571.

survey found that on average, 128 nurses per board, 7,552 across all nursing boards in the United States, are identified as having alcohol- and drug-related issues each year.⁴⁹ Furthermore, substance use disorders are attributed to approximately 67% to 90% of the disciplinary actions by state boards of nursing.⁵⁰ Most state monitoring programs for nurses have adapted the core structure of PHPs to a varying degree. These monitoring programs emphasize the peer support model and often engage participants in a group for the full duration of the monitoring period through contacts by nurses in recovery. Data on treatment compliance and outcomes are forthcoming for the monitoring initiatives in the state of Pennsylvania.

3. Commercial Airline Pilots. The Human Intervention Motivation Study (HIMS) monitoring program for airline pilots has been in formal operation since the early 1980s but the elements of the program were first developed and implemented in 1974, during the same period in which the PHP movement began.⁵¹ At the time, the Federal Aviation Administration (FAA) examined the prevalence of alcohol problems among pilots and worked closely with the airline pilot unions and airlines to address the problem. The airline pilot unions wanted to protect their constituents while airlines wanted to avoid losing money in accidents involving alcohol. These three groups began their work with a goal of helping pilots with alcohol problems obtain five years of sobriety before returning to flight. Over time the required length of sobriety was reduced to three years and then to one year. The leaders developing the program found that a 28-day treatment program alone was not sufficient enough to produce long-term abstinence and most pilots relapsed. The program was amended to provide aftercare which proved to be very beneficial.

Pilots are most commonly referred to HIMS by their peers for substance use problems.⁵² Once in HIMS, pilots are evaluated. Pilots diagnosed with substance use disorders are removed from active flight duty and enter treatment, typically a 28-day inpatient treatment stay. Upon discharge, pilots enter aftercare, a period that lasts for two years from the date they are returned to duty. Aftercare includes outpatient treatment with a psychiatrist, weekly group therapy and close linkage to 12-step fellowships. Pilots are monitored through random testing for alcohol and drugs.

⁴⁹ National Counsel of State Boards of Nursing. (2011). *Substance Use Disorder in Nursing: A Resource Manual and Guidelines for Alternative and Disciplinary Monitoring Programs*. Chicago, IL: NCSBN.

⁵⁰ Haack, M., & Yocum, C. (2002) State policies and nurses with substance use disorders. *Journal of Nursing Scholarship*, 34(1), 89-94.

⁵¹ HIMS Program: <http://www.himsprogram.com/>

⁵² Air Line Pilots Association, International (ALPA). (2009). *Fiscal Year 2010 Appropriations. Written Submission of Air Line Pilots Association, International before the Subcommittee on Transportation, Housing and Urban Development, and Related Agencies Committee on Appropriations, United States House of Representatives*. Washington, DC: Air Line Pilots Association, International. Available: http://www.alpa.org/portals/alpa/pressroom/testimony/2009/ALPATMwrittensubm_4-16-09.pdf

From inception through July 2008, over 4,200 pilots were successfully monitored and returned to flight, with an average of 120 pilots identified, treated and return to work each year.⁵³ HIMS has a long-term success rate of nearly 90%.⁵⁴

4. Lawyers. The Commission on Lawyer Assistance Programs (CoLAP) of the American Bar Association is mandated to educate the legal profession on problems related to substance use, mental health and related issues, and support the work of state programs. LAPs exist in every state, as well as the District of Columbia and the Virgin Islands, with the large majority of programs founded in the 1980s and 1990s. Like PHPs, LAPs vary from state to state. A survey of LAPs showed that many provide services beyond active lawyers, including inactive, suspended or disbarred lawyers, law students and judges; some also provide services to employees of law firms and family members.⁵⁵ All LAPs provide services specifically for problems related to alcohol and drug use while the large majority of these programs also provide services related to mental health issues. Among surveyed LAPs in 2012, the following types of services were provided for admissions: monitoring (79%), assessments/evaluations (76%), monitoring contract development (74%), alcohol and drug testing (74%), and support groups (55%).

B. Addiction Treatment Programs

Many addiction treatment programs provide aftercare to their patients upon formal discharge from inpatient residential treatment; however, managing short- and long-term follow-up with discharged patients may be a difficult additional administrative task and raise unanswered reimbursement questions. Such a cultural shift to long-term care is not easy for treatment programs. Many residential programs are developing new aftercare monitoring programs to maintain contact with discharged patients for longer periods of time.

1. Caron Recovery Network's My First Year of Recovery. Caron Treatment Centers has developed a new aftercare monitoring program, "My First Year of Recovery" (MYFYR). MYFYR is based on the PHP model of care management and is offered to patients and families after residential treatment is completed. Before discharge, the patient and family meet with their assigned Recovery Care Licensed Specialist to develop and sign a "*recovery for life*" contract. These agreements state that patients will abstain from the use of alcohol and other drugs; moreover, they outline the consequences for relapse as determined by patients and their families. Patients and families sign HIPPA and state compliant releases to permit Caron to communicate with the circle of support around the patient, including employers, outpatient therapists, primary care physicians, etc.

MYFYR begins immediately upon discharge as a continuum of care extension from a residential setting at Caron. The program costs \$7,500 per year for up to three years. Caron works with the patients'

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ American Bar Association. (2013). Commission on Lawyer Assistance Programs. Chicago, IL: American Bar Association. Available:

http://www.americanbar.org/content/dam/aba/administrative/delivery_legal_services/l_s_del_2012_lap_comprehensivesurvey.authcheckdam.pdf

outpatient care providers and then transitions into managing the care environment. The patient and two family members are assigned a recovery specialist team made up of one patient specialist and one family specialist. The specialists conduct three individual calls per month and one joint conference call with the entire circle of support identified by the patient. As part of the program, patients are subject to random urine drug tests, up to two times per month or if there is collateral information to indicate a random test. To do so, patients receive GPS notification on their mobile phones of the nearest designated laboratory to which they must go and provide a drug testing sample. Upon completion of the drug test, Caron relays the results to persons designated in the contract, including the patient.

MYFYR requires patients to participate regularly in a 12-step fellowship and obtain a sponsor. After six months, Caron hosts patients at a recovery check-up event to evaluate their progress. Between six months and one year of program participation, patients and family members are individual encouraged to attend a four-day, "Breakthrough" program to confront their emotional recovery needs. Patients and family members also participate in the Caron Recovery Network, an educational 12-step-based educational platform where they can interact in recovery communities, receive ongoing support, track their 12-step work, and interface with their assigned specialists.

As of January 2014, MYFYR included 82 patients and 100 family members. Results of the urine testing indicate very good substance use outcomes. A total of 68% of all urine samples have been obtained with 91% of them negative for drugs and alcohol. Of the 39 patients who have had some substance use, 51% remain engaged in the program with improved urine drug testing results. Caron reports that the MYFYR identifies relapse sooner among its participants than the general recovery support program which is only based on self-report and has a higher percentage of dropout rate by month six.

2. Livengrin Foundation's Treatment and Recovery Engagement and Coordination. The Treatment and Recovery Engagement and Coordination (TREC) program was developed by the Livengrin Foundation, Inc. based on the PHP model. TREC is an "extra-treatment" system that works in parallel to the existing treatment structure, focused on increasing treatment initiation and early engagement as well as long-term recovery support. At the core of the TREC program is the agreement between the individual, treatment provider, and those that have a vested interest and external impact on the client. The agreement is individually tailored to include personalized motivators and associated external components, as well as clear expectations and consequences. The TREC agreement is developed through a detailed assessment of an individual's motivations, values, barriers, and resources as well as interviews with family, employers, employee assistance programs, probation officers, and relevant others. Close monitoring and rapid response to relapse or preliminary indicators of relapse are also critical components of the TREC program.

Recovery coordination efforts of TREC include tailoring alumni support to connect participants to the recovering community, ongoing family and support training and education, intensive support by a case manager throughout a full continuum of inpatient and outpatient care, and a combination of telephone and in person follow up support for one year.

TREC was initially a trial approach to working with a subpopulation of the treatment population with risk factors for early disengagement. Since the inception of TREC, the retention rate for the subpopulation's completion of treatment has almost doubled from 43.75% to 83% (comparing April-June 2012 to April-June 2013). The most recent data show that those at the highest risk for disengagement are now staying 10% longer than the lower risk general population.

C. Independent Monitoring Programs

A number of independent monitoring programs and consulting groups providing services directly related to the *New Paradigm*. Most clients entering monitoring after treatment programs, but also other referral sources, including families.

1. RecoveryAssurance. RecoveryAssurance is an example of an independent monitoring program that since 2010 has provided care management to individuals with substance use disorders, most of whom are referred upon discharge from treatment. RecoveryAssurance is modeled after the monitoring provided by PHPs and includes daily check-ins for random drug screens as well as accountability and support through a designated clinical Advocate. The monitoring contract outlines an accountability plan based on continuing care recommendations from referring treatment program or provider. The individual agrees to abstain from alcohol and other drugs, to submit to random urine drug testing, and to permit the program to contact appropriate individuals such as family members or employers to give progress reports, including relaying drug test results. Participation in 12-step meetings is required and monitored by the individual's designated Advocate. RecoveryAssurance requires contact with anyone prescribing participants medications.

Participant Advocates, who are licensed clinicians, communicate with participants by telephone regularly. During the first quarter of the one-year commitment, participants communicate with their Advocates at minimum two times each week and once each week for the rest of the year. Advocates communicate with family members on a regular basis that can be daily, weekly or monthly as needed to provide education and support.

When relapse occurs, the individual is required by contract to be reassessed to determine the level of care needed, and if indicated, may return to the referring treatment program. Individuals who miss tests are contacted immediately by their Advocate and a test is scheduled for the following day. Appropriate contacts are notified of the missed test. About 20% of urine tests are missed and handled in this way. Following a missed test, the individual is subject to more frequent testing to detect possible relapse.

As of this writing, RecoveryAssurance has enrolled 120 clients with 40 currently active as of November 2013. Early statistics indicate a successful completion rate of approximately 75%. A one-year commitment to the program is required and costs \$4,000 with an additional \$1,500-\$2,500 for urine testing.

2. Messinger Advisors. Messinger Advisors, LLC works with family businesses and trustees in the private pay industry to provide private contingency management for individuals with substance use disorders, modeled on the programs monitoring professionals. Messinger Advisors specifically uses

family influence to support recovery. Families are educated about addiction and assisted in developing appropriate monitoring agreements and trust documents to hold individuals with substance use disorders accountable for their actions and to support their long-term recovery. When indicated, clients are referred to quality treatment, and they are closely monitored to ensure adherence to the signed contract.

3. O'Connor Professional Group. The O'Connor Professional Group is another example of an independent group that provides monitoring services and supervises the care of individuals with substance use disorders. The large continuum of services includes intervention and placement into treatment, but most relate to home-based care management. Early on in monitoring, clients are contacted by their assigned case manager at least once each week to ensure the individual is attending individual therapy visits, 12-step meetings and meeting other obligations. In-person meetings and home visits are also used to maintain contact and to monitor progress of short- and long-term goals. Frequent drug testing is administered by vetted providers in community or by O'Connor Professional Group employees. Family education and communication is an integral part of supervision of the individual, including informing appropriate members of the occurrence of relapse and determining treatment options, or increased services.

4. Post Treatment Supervision. Post Treatment Supervision (PTS) provided by Greenberg & Sucher, P.C. monitors individuals who have completed primary treatment for substance use disorders using the model of the PHPs. This program has been in place for 15 years providing services for participants at the request of families, employers, the legal system, self-referral, etc. The program requires a minimum commitment of six months but last for three or more years; the average participant contract is for 24 months. Individualized monitoring agreements outline all elements of the program including the expectation of abstinence from alcohol and other drugs and responses to relapse. The program includes diagnostic monitoring, including random and directed alcohol and drug testing. In addition to random tests, if a therapist or family member suspects the participant has relapsed, a test is conducted immediately. Participants participate in individual therapy as well as peer-based recovery support groups.

Reimbursement for services is possible through insurance with this model because the care is overseen in a medical context by a certified addiction medicine physician using ICD-9 codes, CMA codes, group therapy and/or progress evaluations. The average cost is from \$5,000 to \$7,5000 per year plus the cost of drug testing which would average additional \$150 per month.

Current Applications of the New Paradigm in the Public, State and Federally Funded Settings

The *New Paradigm* is being used successfully in a limited number of public program settings. Because many of the *New Paradigm* programs work with relatively well-off, well-educated persons with substance use disorders, there has been criticism of the application of the *New Paradigm* to disadvantaged groups. The experience within the criminal justice system begins to answer that criticism. Several notable programs have been implemented and evaluated showing remarkably high

levels of long-term success in the public sector criminal justice setting. Slowly these programs are taking hold and spreading across the country. To our knowledge the *New Paradigm* has not yet been adopted in other types of public addiction treatment programs.

A. Criminal Justice System Programs

The three criminal justice programs discussed below are independent of one another yet they share a similar and very successful model. These programs vary greatly in terms of treatment requirements; however, treatment is available and offered to program participants who need it.

1. HOPE Probation. Hawaii's Opportunity Probation with Enforcement (HOPE) was developed in 2004 in Honolulu in a collaborative effort led by First Circuit Judge Steven S. Alm. HOPE targeted high-risk probationers, including sex offenders, individuals with serious substance use problems, those failing standard probation, and domestic violence offenders. Most HOPE participants are unemployed and undereducated felons. Participants are given a warning hearing, where the rules of the program are explained: Participants are subject to frequent random drug and alcohol testing. A missed test or a positive drug test is met with an immediate short-term jail stay (a few days to one week). Treatment is available to offenders who request it and to those who demonstrate the need for treatment by continued non-compliance and relapse.

In a randomized controlled study of HOPE Probation versus standard probation, HOPE participants were 55% less likely to be arrested for a new crime; 72% less likely to use drugs; 61% less likely to skip appointments with their probation officer; and 55% less likely to have their probation revoked.⁵⁶ On average HOPE participants spent 48% fewer days incarcerated than standard probationers. Over the course of one year, 51% of HOPE participants never had a positive test; 28% had only one positive, 12% had two, and 9% had three or more positives.⁵⁷

Since inception, HOPE has expanded its management of offenders in Hawaii to six felony and three domestic violence misdemeanor courts. As of August, 2013, HOPE included 2,200 offenders, of which accounted for nearly one quarter of all felony probationers on Oahu.⁵⁸ New HOPE-based programs, including pilot programs, have been developed in 18 states across the United States.

2. Drug Courts. Drug Courts use the criminal justice system to promote public safety and public health through therapeutic jurisprudence. A team, made up of judges, prosecution, defense counsel, law enforcement (such as probation officers) and treatment providers work together to provide a system of support, monitoring and care for offenders.⁵⁹ Every participant is clinically assessed to identify and

⁵⁶ Hawken, A. & Kleiman, M. 2009. *Managing Drug Involved Probationers with Swift and Certain Sanctions: Evaluating Hawaii's HOPE*. National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Available: <https://www.ncjrs.gov/pdffiles1/nij/grants/229023.pdf>

⁵⁷ Written communication with Judge Steven S. Alm, First Circuit, Hawaii, December 3, 2013.

⁵⁸ Ibid.

⁵⁹ National Association of Drug Court Professionals. (2013). *Adult Drug Court Best Practice Standards: Volume I*. Alexandria, VA: National Association of Drug Court Professionals. Available: <http://www.nadcp.org/sites/default/files/nadcp/AdultDrugCourtBestPracticeStandards.pdf>

meet the individual's needs, including developing a treatment plan. Participants are closely monitored through frequent random testing for alcohol and drugs and through scheduled and unscheduled visits to the home and place of employment. Participants are required to abstain from alcohol and other drugs, attend court appointments and meet treatment requirements. Active and compliant participation is rewarded and reinforced by the team. Noncompliance is quickly met with sanctions imposed by the judge in the court setting.

Best practices dictate that Drug Courts should focus on the most high-risk, high-need offenders, who have substance use disorders and who are at substantial risk for reoffending or not succeeding under standard protocols of community supervision.⁶⁰ Drug Courts may be successfully linked to other programs for mutual benefit; for example, offenders who fail in Hawaii's HOPE Probation may be transferred to a Drug Court where intensive treatment and more supervision are provided.

3. 24/7 Sobriety Project. South Dakota's 24/7 Sobriety Project targets repeat driving under the influence (DUI) offenders and is used as a condition for bond or pre-trial release, for granting of a suspended sentence or probation, and in family court as a requirement for parents of abused or neglected children. Upon entering the program, participants are required to abstain from the use of alcohol and drugs and comply with program requirements. Participants are subject to either twice-daily alcohol breath tests and random drug urinalyses, or wear continuous alcohol monitoring bracelets and sweat drug patches to identify substance use. Any positive test, missed test or tampering with testing devices results in swift and certain sanctions, typically one to two nights in jail. A recent RAND study of the program between 2005 and 2010 showed that over 99% of the alcohol tests conducted on the estimated 17,000 program participants were negative.⁶¹ Additionally, the implementation of the 24/7 Sobriety Project was associated with a 12% decline in repeat DUI arrests at the county level for the state and a 9% reduction in domestic violence arrests.

Future Applications of the New Paradigm

The current applications of the *New Paradigm* are varied and demonstrate how elements can be used in various populations with success. There is much potential for extending the *New Paradigm*. The established contingency management programs for professionals could be extended to other employees. For example, HIMS is specifically for pilots and has not been extended to other airline employees.

Although for many applications of the *New Paradigm*, monitoring begins upon successful completion of episodes of formal treatment, a system of contingency management and monitoring could be very helpful to individuals who otherwise do not successfully complete treatment.

⁶⁰ Ibid.

⁶¹ Kilmer, B., Nicosia, N., Heaton, P., & Midgette, G. (2013). Efficacy of frequent monitoring with swift, certain, and modest sanctions for violations: insights from South Dakota's 24/7 Sobriety Project. *American Journal of Public Health, 103*(1), e37-e43.

Another general population for whom the *New Paradigm* is particularly relevant is individuals whose substance use threatens others. For example, parents with substance use disorders who share custody and/or visiting rights with another non-using parent could benefit from contingency management. Monitoring could provide them with evidence to support their visitation and/or custody status with their children.

Clinical populations with significant health and psychosocial needs such as Medicaid-eligible populations could also benefit tremendously from the *New Paradigm*. For example, there are many needs-based prenatal and postpartum services in existence for low-income maternal populations (e.g., Healthy Start, Parent-Child Assistance Program, Nurse-Family Partnership). These tend to be very comprehensive; however, none specifically targets reduction or abstinence from substance and alcohol use. While they would likely benefit from care modeled on the *New Paradigm* for their substance use problems, likely challenges to address include: (1) how to incorporate and supplement monitoring-based approaches as part of the existing infrastructure for prenatal services; (2) how to continue motivating patients or finding leverage to help them engage in the long-term monitoring; (3) identifying a funding source for the intense long-term care.

One ongoing example of use of the *New Paradigm* in this arena is led by Treatment Research Institute (TRI) with mothers at risk for having children with fetal alcohol spectrum disorders in Alberta, Canada funded by the Alberta Human Services. The existing prenatal/postpartum services for these expectant mothers is supplemented with incentive-based Soberlink® monitoring for alcohol use. This promising project is spurring much interest in this approach within the area.

Another example comes from TRI researcher Yukiko Washio, Ph.D. working with leaders of a county in Minnesota who are concerned about drinking issues among adolescent girls in the area. Incentive-based Soberlink® monitoring for alcohol use will be first piloted among pregnant adolescent girls. Dr. Washio will then expand this approach to school-aged girls in the county. The county has an infrastructure (i.e., judicial system, schools, healthcare) in place to drive this innovative approach to reduce alcohol use among this at-risk population.

Ethics of the New Paradigm

The *New Paradigm* provides accountable addiction care management, creating incentives for an individual to comply with recommendations of qualified treatment professionals. The *New Paradigm* uses appropriate leverage to hold individuals accountable for their actions. Treatment programs, monitoring providers, and family members are all advocates for the individual. The focus of the *New Paradigm* is helping the individual attain and maintain long-term recovery. The steps taken on that path must be in the interest of the individual and be ethically sound. If an individual relapses, the first question is what does the person need – more treatment, an intervention, or something else. Use of the contingency should be the last resort and the sign of a failed case.

A. Appropriate Leverage, Reward and Contingency

Leverage is not one-size-fits-all for individuals with substance use disorders. Leverage provides external motivation for the individual to remain abstinent while internal motivation can develop and solidify on the individual's path to recovery. Leverage and contingency, including rewards and benefits, must be outlined in the contingency monitoring contract. For individuals entering a *New Paradigm*-based monitoring program immediately following treatment, the contract should be signed *prior* to treatment discharge, when motivation is likely to be at its highest.

Leverage must be age-appropriate. Adults may face consequences of their substance use in the workplace, making their employment an important source of leverage. For others, family relationships can be an important leverage. Some individuals under supervision of the criminal justice system must abstain from substance use to maintain their freedom or parental visitation privileges. Adolescents with substance use disorders may be reliant on their families for support related to finances, education (e.g. college tuition), transportation (e.g. driving privileges), or social activities (e.g. telephone privileges). Maintaining healthy family and other relationships can be an important leverage for many individuals (e.g. visits with extended family (children/grandparents); participating in family meetings, etc.). It is important to identify what is valuable to the individual and integrate it into the care management to provide appropriate leverage. No matter the leverage used and the resulting consequence to hold the individual accountable, relapse to use does not mean cutting off the individual from support.

Positive, rewarding contingencies need not be large to impact behavior; however, the rewards and, similarly, consequences must occur *immediately* after a specific behavior occurs. The use of small contingencies has been effective in making behavioral changes related to the use of substances among high-risk populations. For example, pregnant women who smoke cigarettes during pregnancy were provided small rewards for bio-chemically verified smoking abstinence.⁶² Smoking abstinence was rewarded and reinforced through receipt of vouchers. The cost over the pregnancy and three-month postpartum period per woman was ~\$400 with a maximum potential earning of \$1,000. Results indicate support for improving abstinence rates and birth outcomes. Helping pregnant women to abstain from smoking during pregnancy in the United States can produce an estimated saving of over \$4 billion per year from neonatal, first-year infant care and maternal medical costs and lost productivity.

The clear, known, and consistent use of leverage and rewards outlined in the monitoring agreement specifically designed for the individual is a crucial part of ensuring the successful use of the *New Paradigm* in any population.

⁶² Higgins, S.T., Washio, Y., Heil, S.H., Solomon, L.J., Higgins, T.M., & Burnstein, I.M. (2012). Financial incentives for smoking cessation among pregnant and newly postpartum women. *Preventive Medicine, 55 Suppl*, S33-40.

Factors that Contribute to the Success of the New Paradigm

A. Coordinated Support and Case Management

The *New Paradigm* requires a team approach to monitoring and managing individuals with substance use disorders and often includes the coordination of medical and psychiatric care with case management. Although the programs differ, the professionals' monitoring organizations, like the programs of the criminal justice system, and post-treatment and independent monitoring programs, have a network of people working together and in close communication.

Using a third party monitor, outside of the individual's family, provides freedom to the family to be engaged in the individual's recovery without having to be responsible for ensuring the individual adheres to the monitoring contract directly. Care management removes family and others from being the "addiction police." It should not be the responsibility of a family member to develop a monitoring contract or facilitate the drug and alcohol testing, or other program elements though families can play an integral part of helping the monitored individual attain and maintain recovery. The level of monitoring outlined in the *New Paradigm* requires case management outside the family circle.

B. Drug and Alcohol Testing Technology

Testing technology is an essential part of monitoring individuals with substance use disorders; however it is also a helpful tool for individuals that wish to demonstrate their sobriety with objective data to family members and employers, among others. This can be critical to regaining the trust that has been lost. Drug testing is a measure of stability of this chronic illness, primary symptoms of which include denial and minimization of use.

Drug and alcohol testing technology has dramatically improved over the last few decades. Today testing is no longer limited to urine; other testing matrices include oral fluid, hair and sweat, each of which has benefits and drawbacks. The rapid and remote technology that monitors breath alcohol concentration has changed alcohol monitoring. For example, Soberlink, Inc. developed the first handheld mobile breath device designed specifically for remote alcohol monitoring. The Soberlink Breathalyzer[®] takes a photograph of the user being monitored at the time a sample is provided to confirm his or her identity. The photograph, immediate alcohol test result, and geographic location information are wirelessly transmitted to Soberlink's cloud-based monitoring website. Direct alerts can be set up for contacts to be notified when there is a violation, including a missed test or positive test result. The technology is used in some areas by the criminal justice system and is used by some PHPs and private monitoring groups.⁶³ Transcutaneous remote continuous alcohol monitoring (SCRAM CAM[®]) is worn 24 hours a day and samples the individual's perspiration every half hour to measure for alcohol consumption.⁶⁴ This technology is successfully used among criminal justice system programs. Finally, identification of alcohol markers EtG and EtS have expanded the scope of alcohol testing.⁶⁵

⁶³ See Soberlink: <http://www.soberlink.net/>

⁶⁴ See SCRAM Systems: <http://www.scramsystems.com/>

⁶⁵ More information can be found at Ethylglucuronide (EtG) and Ethylsulfate (EtS) at <http://etg.weebly.com/>

The type of testing conducted, matrix and technology used, either screening immunoassay (on-site or laboratory) and/or confirmatory (gas chromatography-mass spectrometry [GC-MS] or liquid chromatography-mass spectrometry [LC-MS]) are important elements of the contingency management contract, as is the panel of drugs for which the individual may be tested.⁶⁶ The inclusion of marijuana and alcohol has been debated among some drug tested populations but both are recommended for inclusion in testing protocols in the *New Paradigm*. All drugs that have been identified as problems for the individual should be included on tests, as should the most frequently used drugs. In order to be effective, drug and alcohol testing cannot be sporadic or scheduled. It must be random and frequent, particularly early on in the path to recovery. As time passes, testing may become less frequent but always random.

C. Recovery Support

Many varieties of recovery mutual aid groups and non-clinical peer-recovery support services offered by treatment programs, recovery-based community organizations, and allied service organizations (e.g., recovery ministries).⁶⁷ Managed health organizations may provide services from Peer Recovery Support Specialists (PRSS) and access to independent recovery coaches. While these services may be available in many locations throughout the United States, they may or may not be standardized even within programs of the same name or genre. This report serves as a guide to features that may be available in such services.

Not every person achieves the important status of recovery through the use of one (or more) peer recovery support services; however, such services can provide much-needed assistance to the individual. For example, in the 12-step fellowships, linking with a sponsor – and later, becoming a sponsor – is a useful part of working toward recovery. In 2012, an estimated 2.1 million Americans obtained informal treatment in a self-help group.⁶⁸

The main text of Alcoholics Anonymous, “The Big Book”, describes the way in which peer-based connections work, noting that individuals with substance use disorders may be hesitant to discuss their situation even with qualified individuals, but for example, for alcoholics, “the ex-problem drinker who has found this solution, who is properly armed with facts about himself, can generally win the entire confidence of another alcoholic in a few hours. Until such an understanding is reached, little or nothing can be accomplished. That the man who is making the approach has had the same difficulty, that he obviously knows what he is talking about, that his whole department shouts at the new prospect that he is a man with a real answer, that he has no attitude of Holier Than Thou, nothing whatever except the

⁶⁶ For example, federal drug testing programs include on-site urine tests to identify amphetamines (various stimulant drugs as a drug class), marijuana metabolites (THC), cocaine metabolites, opiates (natural opiates such as codeine and morphine), and phencyclidine (PCP). There are far more testing options beyond these drugs.

⁶⁷ Center for Substance Abuse Treatment. (2009). What are Peer Recovery Support Services? HHS Publication No. (SMA) 09-4454. Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Available: <http://store.samhsa.gov/shin/content/SMA09-4454/SMA09-4454.pdf>

⁶⁸ Substance Abuse and Mental Health Services Administration. (2013). *Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-46, HHS Publication No. (SMA) 13-4795. Rockville, MD: Substance Abuse and Mental Health Services Administration.

sincere desire to be helpful; that there are no fees to pay, no axes to grind, no people to please, no lectures to be endured—these are the conditions we have found most effective. After such an approach many take up their beds and walk again.”⁶⁹

D. Measuring Outcomes

Outcomes of the *New Paradigm* system of care management can be measured in various ways. The results of frequent random drug and alcohol monitoring reinforces the cessation of use, or reveals continued use and need for further intervention. Retention in monitoring, or length of participation, is another important outcome. The *New Paradigm* is oriented to the long-term. Although the periods of monitoring provided by the programs featured in this report vary, monitoring for individuals with substance use disorders should last at minimum of one year. However, monitoring can last much longer. For example, the physician health programs producing excellent results over five years of monitoring.

A measure of wellness can provide additional insight to program and participant success. Wellness data can be obtained through instruments like the well-known and cross-culturally comparable World Health Organization Quality of Life assessment. As discussed throughout this report, the concept of recovery extends beyond abstinence. Wellness measures can help assess how individuals are doing in other spheres of life such as return-to-work, relationships, nutrition, decreased emergency department visits for addiction-related issues, exercise, sleep hygiene, attendance at 12-step meetings, etc. This kind of information is often of interest (or requirement) of insurance companies.

Outcomes can also be measured in aggregate costs, including health care costs such as hospital admissions, re-admissions and treatment stays, as well as costs to the public such as crime and accidents related to addiction, and to the individual, such as lost wages, jobs, and impact on the family or dissolution of family and social ties. Measured against these costs, the costs of the *New Paradigm* are a bargain.

Research Opportunities

The following are examples of the research needs related to the *New Paradigm* and are not presumed to be comprehensive. Only through publication of research studies reporting program descriptions, elements and outcomes will the salient elements of the *New Paradigm* become widely known and perceived to be desirable.

New Paradigm Programs. Currently, there is limited research on the various programs of the *New Paradigm* that are reviewed in this report. All of the examples of the *New Paradigm* that have been discussed present important new research opportunities. It is very likely that other programs not reviewed in this report exist under the umbrella of the *New Paradigm*. The development, implementation and evaluations of the programs of the *New Paradigm* present critical new research opportunities related to treatment and managed care

⁶⁹ *Alcoholics Anonymous*. (2001). New York, NY: Alcoholics Anonymous World Services, Inc., p.18.

New Paradigm Program Components. Comparative research is needed to more fully identify and understand the components of the monitoring programs that are most powerful and cost-effective. For the various programs within the *New Paradigm*, differences exist in the range of required elements compared to those that are more simply recommended. The data available on the outcomes of professional monitoring programs offer significant promise for what is possible in the field but the underlying mechanisms are not fully understood or differentiated. Comparisons of programs that serve the same population but that utilize different program interventions would provide critical information in the impact of certain program components.

Generalizability of New Paradigm to Various Populations. Research is also needed that compares diverse populations to establish the generalizability of the *New Paradigm* beyond the narrow range of populations currently evaluated.

Adolescence and Families. A particular population of interest for the *New Paradigm* is adolescents. There is currently no known research evaluating the use of the *New Paradigm* with young persons with substance use disorders. Because substance use disorders often begin in adolescence, this age group presents a unique opportunity for long-term research, and includes the role of families, and particularly parents.

Role of Recovery Support. One of the components of the *New Paradigm* that is not universally required by all programs discussed in this report, although always recommended, is engagement in recovery support. In addition to evaluating the role of recovery support in the long-term outcomes of programs in the *New Paradigm*, a specific research opportunity is the contribution of health professionals in providing recovery support to others with substance use disorders. This population is particularly relevant given that the use of the *New Paradigm* has been best studied (and most widely used) among health professionals.

Reinforcements of Behavior and Protective Factors. There is a need to develop innovative ways to create practical reinforcers of behavior. Research has demonstrated the effectiveness of voucher-based reinforcement therapy or monetary-based incentives in the treatment of substance use disorders.⁷⁰ Small levels of positive reinforcement contingent upon drug-free urine among individuals with substance use disorders have produced dramatic decreases in the use of cocaine, opiates and cigarettes at low expense. An important related research question is to identify the alternative behaviors that are protective reinforcers. What behaviors take the place of drug use among persons with substance use disorders?

Measurement-Based Practice. There is a larger need in clinical research today to improve evidence-based practice by providing measurement-based practice. Measurement is as important as service delivery. Measurement can provide immediate information about treatment and monitoring non-response that can alert all parties to intervene and change course. It also allows for identification of

⁷⁰ Lussier, J. P., Heil, S. H., Mongeon, J. A., Badger, G. J., & Higgins, S. T. (2006). A meta-analysis of voucher-based reinforcement therapy for substance use disorders. *Addiction, 101*(2), 192-203.

programs that are showing particularly good outcomes so that this positive combination of elements can be investigated for broader dissemination. For example, a surveillance system monitoring cystic fibrosis (CF) programs can identify under-performing and over-performing programs that has resulted in improved standards of care and greater survival rates for those suffering from CF. This has relevance to the widespread use of the *New Paradigm*. As programs based on the *New Paradigm* are developed and monitored, measuring and comparing outcomes will be essential.

Implementation of the New Paradigm in the Context of Today's Health Care Industry

Given the recent changes in health care reform in the United States, now is the appropriate time to promote the widespread implementation and coordinated evaluation of the *New Paradigm*. Over the next decade, millions of dollars will be invested into addiction treatment in the United States by investment firms, driven in part by both the Patient Protection and Affordable Care Act (ACA) and the Mental Health Parity Act.

The recently passed Mental Health Parity Act mandated that the same quality of care be provided to treat substance use disorders as comparable to other chronic diseases. Further, the ACA, which aims to increase coverage and lower costs of insurance, provides ample opportunity to redesign the delivery system of care for substance use disorders.

Given this backdrop, when considering the *New Paradigm for Recovery*, it is important to consider fairness and equitable access of care. If an effective diabetes management program was only available to certain groups of people (in the way that the *New Paradigm* programs of HIMS, PHPs, and LAPs are available to pilots, physicians and lawyers, respectively to treat substance use disorders), the nation would not stand for it. The same standard should apply to those suffering from substance use disorders; the effective system of care management of the *New Paradigm* should be accessible to all in need. It is encouraging that many programs, such as those featured in this report, have created care management programs of the *New Paradigm* but there remains a large gap in availability of this care management to the masses.

The American healthcare industry is presently moving away from fee-for-service medicine in favor of rewarding health professionals and hospitals for keeping patients healthy. Accountable care organizations (ACOs) are made up of physicians, hospitals and other providers and deliver coordinated health care services to patients. For example, under the ACA, hospitals will be penalized if they re-admit a patient within one month of discharge, making hospital systems that are ACOs naturally incentivized to keep people in remission over the long-term in a cost-effective way. Similarly, value-based payment will likely become much more common in which for a period of time (e.g. one year) recovery is up to the provider at a fixed cost. Incorporating a system of care management under the *New Paradigm*, including monitoring, contingencies, and strong linkage to 12-step fellowships, could provide a cost-effective way of treating high-burden, high-volume, disease such as addiction.

Bringing the *New Paradigm* to the public sector – both Medicare and Medicaid – is an important goal to make a lasting impact to improve outcomes from substance use disorders. Many people suffering substance use disorders do not have private insurance and/or cannot cover the costs of addiction services today. Medicare presently covers an estimated 50 million Americans age 65 and older.⁷¹ The prevalence of substance use disorders among the aging population of baby boomers is expected to double from 2.8 million (annual average from 2002-2006) to 5.7 million in 2020,⁷² making this population and their caregivers^{73 74} a critical focus for future care management.

Medicaid is the single largest payer for mental health services, which includes services related to substance use disorders. The Center for Medicaid and CHIP services reports that, “providing effective substance abuse treatment to Medicaid recipients have been shown to offset their medical costs by 20 percent.”⁷⁵ The experience of state Medicaid programs with “health home” services may be helpful when evaluating the potential use of the *New Paradigm* among Medicaid populations. Health home services are specifically for individuals with multiple chronic illness diagnoses, including substance use disorders. Individualized case management coordinates services to help the individual manage the chronic illnesses, improve overall health and reduce health care costs.

There are many potential limitations for implementing the *New Paradigm* for individuals on Medicaid. Given the high level of communication and coordination needed in the *New Paradigm* to make it effective, there are practical challenges of implementing such a program among Medicaid patients. Artificial barriers often are in place that do not permit sharing information across settings which means care can be both inconsistent and episodic. Basic patient information may be inaccurate or incomplete. These obstacles may be compounded for individuals involved with various components of the criminal justice system, as they transition from one system or jurisdiction to another, then return to the community under the aegis of Medicaid. Creating a consistent care network for beneficiaries and communities is a significant challenge.

There is also great diversity among state Medicaid programs in the care model and covered services for behavioral health and substance use disorders. Some Medicaid programs have comprehensive behavioral health and substance use disorder services and can reimburse the costs of specific services

⁷¹ Henry J. Kaiser Family Foundation. (2012). Medicare at a glance. Available: <http://kff.org/medicare/fact-sheet/medicare-at-a-glance-fact-sheet/>

⁷² Han, B., Gfroerer, J. C., Colliver, J. D. & Penne, M. A. (2009). Substance use disorder among older adults in the United States in 2002. *Addiction*, 104(1), 88-96.

⁷³ Rospenda, K. M., Minich, L. M., Milner, L. A., & Richman, J. A. (2010). Caregiver burden and alcohol use in a community sample. *Journal of Addictive Diseases*, 29(3), 314-324.

⁷⁴ Substance Abuse and Mental Health Services Administration and Administration on Aging Behavioral Health Technical Assistance Center. (2013). Older Americans Behavioral Health, Issue Brief 12: Caregivers as partners and clients of behavioral health services. Available:

http://www.aoa.gov/AoARoot/AoA_Programs/HPW/Behavioral/docs2/Issue%20Brief%2012%20Caregivers.pdf

⁷⁵ Center for Medicaid and CHIP Services. (2012, December 3). CMCS Informational Bulletin: Coverage and Service Design Opportunities for Individuals with Mental Illness and Substance Use Disorders. Department of Health & Human Services. p.2

related to the *New Paradigm*, such as urine drug testing (e.g. District of Columbia⁷⁶). Some states (e.g. West Virginia) are currently paying providers to follow-up with individuals and link them to other services.⁷⁷ But there remains much hope for extending the *New Paradigm* to Medicaid populations in the near future, including specific interest among addiction treatment providers who currently serve this population for piloting care management based specifically on the *New Paradigm*.

New policies and programs have been developed to support state efforts to reform service delivery for behavioral health issues including substance use disorders. CMCS has identified general principles to guide the delivery of services related to substance use disorders. Its goals to direct the design of such services include:

- *“Effective use of screening for mental and substance use disorders, including strategies to refer and effectively treat individuals with these conditions.*
- *Increased access to behavioral health services for persons with serious and/or chronic disorders.*
- *Improved integration of primary care and behavioral health, and in some instances, long term services and support to obtain better health outcomes for individuals with mental and substance use disorders.*
- *Better availability of Evidenced Based Practices to enhance recovery and resiliency and reduce barriers to social inclusion.*
- *Strategic development, implementation and testing of new benefit design and service delivery with models that are taken to scale.”*⁷⁸

These goals are in line with the *New Paradigm*.

Conclusions

The *New Paradigm* holds the promise of making long-term recovery—not relapse—an expected outcome of managing substance use disorders. One of the expected outcomes of widely implementing the *New Paradigm* is to elevate the status of recovery for others, including addicted people, to see, to seek and to celebrate. According to Faces & Voices of Recovery, there are over 20 million Americans in active recovery.⁷⁹ Just as cultural groups form around and reinforce substance use, groups form around and reinforce the recovery process. Recovery is now penetrating every aspect of modern life, from health care to education and from the workplace to the family.

⁷⁶ Robert Vowels, MD, MPH, Medical Director, District of Columbia Department of Health Care Finance, November 18, 2012.

⁷⁷ Cynthia Parsons, Program Manager Behavioral Health at West Virginia Department of Health and Human Resources, November 18, 2013.

⁷⁸ Center for Medicaid and CHIP Services. (2012, December 3). CMCS Informational Bulletin: Coverage and Service Design Opportunities for Individuals with Mental Illness and Substance Use Disorders. Department of Health & Human Services. p.3

⁷⁹ Faces & Voices of Recovery. (n.d.) How many people in the U.S. are in recovery? Available: <http://www.facesandvoicesofrecovery.org/about/faq2.php>