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Alcoholism/Addiction as a Chronic Disease: From Rhetoric to Clinical Reality¹

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Abstract

Although characterized as a chronic disease for more than 200 years, severe and persistent alcohol and other drug (AOD) problems have been treated primarily in self-contained, acute episodes of care. Recent calls for a shift from this acute treatment model to a sustained recovery management model will require rethinking the natural history of AOD disorders; pioneering new treatment and recovery support technologies; restructuring the funding of treatment services; redefining the service relationship; and altering methods of service evaluation. Recovery-oriented systems of care could offer many advantages over the current model of serial episodes of acute care, but such systems will bring with them new pitfalls in the personal and cultural management of alcohol and other drug problems.

Alcoholism and other addictions have long been characterized as chronic diseases, but their treatment continues to be marked by serial episodes of acute care (O'Brien and McLellan, 1996; Kaplan, 1997; McLellan, et al, 2001). There is growing disillusionment with this acute care model of intervention, and rising interest in the stages and processes of long term addiction recovery. This confluence may mark an emerging shift from a treatment paradigm to a recovery

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paradigm in the clinical management of severe and enduring AOD problems. This essay will: 1) outline the history of the conceptualization of addiction as a chronic illness, 2) identify current clinical practices that continue to reflect an acute model of intervention, 3) summarize key concepts that undergird the shift toward a recovery management intervention model, 4) explore areas of contemporary clinical practice that will change within this new recovery focus, and 5) discuss potential pitfalls in the movement toward a recovery management.

I. Addiction as “Chronic” Disease: A Brief History

The conceptualization of repeated and destructive episodes of drunkenness as a disease rather than a vice (or as a vice that could become a disease) rose in the late eighteenth century at a time American alcohol consumption virtually exploded (Rorabaugh, 1979; Levine, 1978). The late eighteenth and nineteenth century writings of Anthony Benezet, Benjamin Rush, Samuel Woodward and William Sweetser conceptualized the nature of this newly perceived disease and catalogued the consequences that resulted from prolonged and repeated intoxication. Collectively, these writings portrayed intemperance as a disease that is chronic and progressive (Benezet, 1774; Rush, 1814; Sweetser, 1828; Woodward, 1838).

In the mid-to-late nineteenth century, this disease received new medical labels: *dipsomania*, *chronic alcoholism*, some of which--*inebriism*, *inebriety*—reflected the extension of the disease concept to embrace addiction to narcotics, cocaine, chloral and ether (Crothers, 1893; White, In Press). During this same period, the disease concept of inebriety spawned a network of inebriate homes, inebriate asylums and private addiction cure institutes. Nineteenth century addiction medicine journals and texts characterized alcohol and other drug addiction as a chronic, relapsing disease (Marcet, 1868; Brown, 1872; Crothers, 1893; Parrish, 1883). In 1879, Dr. T.D. Crothers, editor of the *Journal of Inebriety*, typified comparison of addiction to other chronic medical disorders during this era:

The permanent cure of inebriates under treatment in asylums will compare favorably in numbers with that of any other disease of the nervous system which is more or less chronic before the treatment is commenced.

The disease concept fell out of favor in the early decades of the twentieth century. A wave of therapeutic pessimism and new alcohol and other drug prohibition laws led to a collapse of most treatment institutions. A reformulated disease concept emerged following the repeal of Prohibition that, by defining alcohol problems in terms of a vulnerable minority rather than the alcohol itself, provided a way to address alcohol problems while escaping a century of acrimonious Wet-Dry debates (Roizen, 1991). This reborn disease concept became the centerpiece of the “modern alcoholism movement” (Anderson, 1942; Mann, 1944). The documents of this movement consistently depict alcoholism as a disease and, more specifically, a chronic disease. As early as 1938, a report of the Scientific Committee of the Research Council on Problems of Alcohol noted:

An alcoholic should be regarded as a sick person, just as one who is suffering from tuberculosis, cancer, heart disease, or other serious chronic disorders (quoted in Johnson, 1973).

In the late 1940s and 1950s, Pioneer House, Hazelden, and Willmar State Hospital developed what came to be known as the “Minnesota Model” of chemical dependency treatment. This model, which philosophically dominated the treatment of alcoholism in the second half of the twentieth century, was a reaffirmation of the belief that alcoholism was a “chronic, primary, progressive disease” (Cook, 1988; Spicer, 1993). The conceptualization of addiction as a chronic disease subsequently became the rhetorical centerpiece of late twentieth century policy

positions taken by such organizations as the National Council on Alcoholism and Drug Dependence and the American Society of Addiction Medicine (1976, 1990). The proposition that addiction was a disease and the characterization of its chronicity (Vaillant, 1983; Lewis, 1993; Leshner, 1997) subsequently came under serious attack (Fingarette, 1989; Peele, 1989; Peele and Brodsky, 1992; Schaler, 2000) and sparked acrimonious debates regarding the nature of severe and persistent alcohol and other drug problems and how such problems could be best resolved (White, 2001a).

II. Rhetoric versus Clinical Practice

In spite of the recent challenges, the long tradition of depicting addiction as a chronic, relapsing disease continues. Treatment practices, however, continue to be designed and delivered in self-contained, acute episodes of care (Ethridge, et al, 1995). Historically, professionals *assess* and *admit* a *patient* to a course of inpatient or outpatient *treatment*, *discharge* that patient to *aftercare*, and then evaluate whether treatment “worked” by measuring the effect of this single episode of care upon the patient’s post-treatment alcohol/drug consumption and psychosocial adjustment over a brief follow-up period. Such a model of intervention assumes an intervention process whose beginning, middle and end can be plotted over a brief period of time, not unlike interventions used to treat acute trauma, appendicitis, or a bacterial infection.

Refusing to admit clients to treatment because of “poor prognosis” (prior treatment “failures”) and administratively discharging clients for using alcohol or other drugs (exhibiting inability to abstain/loss of control) also reflect the failure to perceive these conditions as chronic in character. Where durability and exacerbation of symptoms in other chronic disease states is viewed as validating evidence of the disorder and grounds for an altered type and intensity of service intervention, the display of, or exacerbation of, symptoms in the addiction treatment arena has historically constituted grounds for service refusal or termination.

Arguments over whether addiction treatment should be inpatient or outpatient, whether it should consist of 5 days or 28 days or 5 sessions or 10 sessions, or whether cognitive behavioral therapy is more effective than family therapy or “step work” are all arguments inside the acute care treatment paradigm. Even extended treatment, where it still exists, is often simply a longer version of the same cycle of admit, stabilize, and discharge in which clients briefly participate in “aftercare” and mutual aid groups. In spite of the treatment field’s rhetoric that addiction is a chronic disease, its primary interventions do not reflect a model of chronic disease management.

For fear of overstating this point, it should be noted that there are episodes in the history of addiction treatment and recovery that do exemplify a vision of long-term recovery management. Nearly all of the alcoholic mutual aid societies in American history have taken this longer view of chronic disease (recovery) management (White, 1998; White, 2001d). When Synanon, the first ex-addict directed therapeutic community, encountered a high relapse rate among its first graduates, it shifted its goal of returning rehabilitated addicts to the larger community and replaced that goal with the creation of an alternative drug free community where one could live forever (Mitchell, Mitchell and Ofshe, 1980). Methadone maintenance, as pioneered by Dole and Nyswander, reflected a medically-directed model of long term addiction recovery management (Dole, 1988, 1997).

What these quite different approaches share in common is that they were all severely criticized for their longer vision of recovery management. Mutual aid groups have been (and continue to be) criticized for shifting the addict’s dependency on a drug to prolonged dependency on the support group, Synanon was criticized for its failure to return addicts to the larger

community, and methadone was criticized for the very aspects that exemplified the chronic disease management model: prolonged maintenance of narcotic addicts on a stabilizing, opiate agonist and sustained psychosocial supports. This history would suggest that new efforts to shift from an acute to chronic disease management model of addiction treatment might well face similar resistance.

III. Toward a Chronic Disease/Recovery Management Model

If one were searching for a pivotal breakthrough of consciousness about the distinction between acute and chronic models of addiction disease intervention, it might very well be found in George Vaillant's 1983 work, *The Natural History of Alcoholism*. Vaillant's longitudinal study of alcoholism and recovery challenged three historical assumptions about the disorder and its treatment: 1) alcoholism can be effectively treated with a single episode of acute care, 2) a treatment episode that is followed by relapse is a failure, and 3) repeated relapses following multiple episodes of acute treatment mean that either the condition or the particular patient is untreatable (Vaillant, 1983). Vaillant's overall work was so pregnant with new ideas that his challenge of these basic premises was lost.

The acute care model of intervening in alcohol- and other drug-related (AOD) problems dominated the explosive growth of treatment in the 1970s and 1980s. In failing to consistently initiate enduring sobriety following a single episode of treatment, the model, by consequence rather than intent, blamed clients for poor clinical outcomes. The model also contributed to the rise of therapeutic pessimism within the larger culture, and helped fuel an ideological and financial backlash against the addiction treatment industry in the 1990s (White, 1998). As an aggressive system of managed care dramatically shortened both inpatient and outpatient treatment, there was growing unease within the treatment community regarding the practice of placing clients with high problem severity and duration through multiple episodes of unlinked, brief treatment that for many did little to alter the long term course of their disorders. This practice proved as demoralizing to treatment staff as it was to the clients and families to which it was applied.

In the October 4, 2000 issue of the *Journal of the American Medical Association (JAMA)*, a potentially historic article appeared entitled "Drug Dependence, a Chronic Medical Illness: Implications for Treatment, Insurance, and Outcomes Evaluation" that was authored by Drs. McLellan, Lewis, O'Brien, and Kleber. The report marks the most complete elaboration to date of the concept of chronic addiction disease. The *JAMA* article reflects several factors now pushing the addiction treatment field away from an acute care model and toward a chronic disease (recovery management) model of problem intervention.

First, there is a growing recognition that managing severe and persistent AOD problems through single or serial episodes of acute treatment is clinically ineffective and constitutes poor stewardship of individual, family and community resources. The "treatment research conducted at the University of California's Drug Abuse Research Center underscores several key points in this emerging view:

- A single, acute intervention rarely has sufficient effect to initiate stable and enduring recovery in those with severe and persistent alcohol and other drug problems.
- Multiple episodes of treatment may be viewed not as failures but as incremental steps in the developmental process of recovery.
- Treatment episodes may have effects that are cumulative (Hser, et al, 1997).

Second, there is a growing recognition that addiction disorders are often chronic and relapsing in nature (Simpson, et al, 1986), have much in common with other chronic diseases (O'Brien and McLellan, 1996), and that new technologies of managing chronic disease could and should be adapted for the treatment of addiction (Lewis, 1993; McLellan, Lewis, O'Brien, and Kleber, 2000).

Third, the same managed care system that has lowered treatment dose and intensity and shifted the focus of intervention from one of recovery to that of cost-containment has spawned a treatment renewal movement and a new grassroots recovery advocacy (consumer) movement. These movements are developing a deeper understanding of the long term addiction recovery process and how indigenous community resources may support this time-enduring process (White, 2000c).

Federal and state agencies that fund addiction treatment services have also begun to re-evaluate the traditional acute models of professional intervention. In Illinois, the Department of Human Service's Office of Alcoholism and Substance Abuse has funded the Behavioral Health Recovery Management (BHRM) project to conduct such a re-evaluation. The BHRM project is a multidisciplinary effort to develop service principles and clinical care practice guidelines for the long-term management of severe and persistent behavioral health disorders (Boyle, White, and Loveland, 2000). Such efforts are part of a more global interest in models of "disease management" that hold promise in improving the quality of health care while reducing health care costs (Lazarus, 2001).

IV. The Nature of Chronic Disease

Chronic diseases are disorders whose symptoms and their severity ebb and flow over an extended period of time; such disorders are often characterized by periods of remission and relapse of varying duration over an extended period of one's life. There are hundreds of thousands of people who have achieved stable and sustained recovered from severe and persistent AOD problems. Many individuals who never achieve full remission can and do achieve long periods of symptom remission and an enhanced quality of life.

Acute Versus Chronic Disorders *Problematic alcohol and other drug use may be just that—problematic--without constituting a chronic disorder. Alcoholism/addiction exists within a larger arena of persons who experience alcohol- and drug-related problems. Models of sustained recovery management should not be applied to transient, though problematic, episodes of excessive AOD use. Many persons have utilized natural supports, mutual aid involvement or a single episode of treatment to initiate permanent resolution of their AOD-related problems.*

Acute disease is culturally viewed as something that happens to you; chronic disease is viewed as a defect in who you are. The challenge of chronic disease management is to manage the disease without turning a person into a thing and contributing to the social stigma associated with the condition.

The Etiology of Chronic Disease *Chronic addiction disease emerges and intensifies through the interaction of multiple factors: the potency of the infectious agent (the drug), the biological and developmental vulnerability of the host; and the physical, political, economic, and social/cultural environment in which the person-drug relationship occurs.*

A large number of chronic diseases have been called "diseases of lifestyle" because they are characterized by risk/resiliency factors related to such areas as daily diet, work habits, frequency and type of exercise, sleep patterns, medication compliance, style of stress

management, drug use, exposure to environmental toxins, specifically contra-indicated (high risk) behaviors, and family and social relationships (Nicassio and Smith, 1995).

The Onset of Chronic Disease *Chronic diseases can have either a sudden onset or a gradual onset* (Rolland, 1987).

The process through which an acute disorder migrates to the status of a chronic disorder is not fully understood. There is in all probability a priming dose of symptom activation necessary to move an acute disorder to the status of a chronic disease. Each acute episode of a chronic disease lowers the kindling point of symptom activation for the next episode. The priming process varies by many factors, including age of exposure. The lower the age of onset of regular use, the greater the potential for addictive disease and the greater the severity and chronicity of addictive disease (Chou and Pickering, 1992; Grant and Dawson, 1997). The kindling point can be raised by postponing age of onset of regular drug use and by enhancing biological resistance (medication, exercise, diet), cognitive abilities (coping and problem solving skills) and social supports (pro-recovery family and peer relationships).

Disease Course and Variability *Chronic diseases exhibit a high degree of variability in pattern of onset, course (life trajectory), intensity, and outcome.* Chronic diseases may present as steadily self-accelerating (progressive), constant, or with alternating cycles of symptom remission and symptom reactivation (relapse) (Rolland, 1987). Most chronic diseases are also subject to unexplained, sustained remission—what in the addiction literature has been referred to as spontaneous remission, auto-remission, natural recovery, maturing out or self-cure (Granfield and Cloud, 1999). Chronic addiction disease also varies widely in its degree of incapacitation and in the speed and timing of such incapacitation. Addiction disease varies in physiological severity (morphological changes that threaten biological homeostasis and viability), functional severity (impact on quality of life and performance of life roles), and burden of illness (costs to the individual, family and society) (Rolland, 1987; Stein, et al., 1987; Starfield, 1974). Such variability demands a high level of commitment to individualized assessment and treatment--both across clients and at different points of time in the life of the same client.

Disease/Problem Co-existence and Interaction *Chronic diseases heighten vulnerability for other acute and chronic diseases.* Alcoholism and other addictions invite other diseases that debilitate and threaten premature death. Acute and chronic diseases interact in ways that amplify their combined intensity and duration and the costs incurred in their management (Stein, et al, 1987). The longer an addiction disease is active, the higher the risk for acute physical toxicity (overdose), chronic physical toxicity (addiction-related tissue damage, e.g., cancer, emphysema, liver disease), behavioral toxicity (trauma or death via accident / violence), infectious diseases (e.g., HIV/AIDS, hepatitis B and C, tuberculosis), and co-morbid psychiatric illness. All programs serving individuals with severe and persistent AOD disorders must become dual and multiple disorder programs that serve the whole person/family through integrated models of care (Lebowitz and Harris, 2000; Drake, et al, 1998; Minkoff, 1989; Norquist, Lebowitz, and Hyman, 1999; Osher, 1996).

Family and Intimate Social Networks and Chronic Diseases *The individual and collective resources of families and social networks are strained (and drained) by adaptation to chronic disease.* A family's capacity for adaptation changes across the family life cycle (Goodheart and Lansing, 1997). The family's style of adaptation to a chronic illness is often shaped by the transgenerational history of responding to crisis, illness, loss and death (Rolland, 1987). Chronic disease of a family member can, by disrupting family rituals, re-aligning family

roles; and by altering the allocation of family resources, impact the health and development of all family members as well as the health of adult intimate relationships and parent child relationships.

V. Concepts and Principles of Recovery Management

The shift from acute intervention models to recovery management models of intervening in severe and persistent AOD problems requires new ways of conceptualizing these problems and their resolution or amelioration.

Disease Management *Persons suffering from chronic, incurable disorders need models of intervention that focus on the management of these disorders rather than the cure or treatment of these disorders. Disease management or, as we prefer, recovery management, provides an alternative to the traditional mode of reacting to life-impairing and life-threatening episodes of chronic disorders with unrelated, serial episodes of acute, emergency-oriented care.*

Recovery management implies a longer term vision of influencing the course of a disorder to enhance length and quality of life. It is about learning, in the absence of a cure, to contain a disorder and to optimize personal and family health over time.

Chronic Disease and Recovery The shift from perceiving and treating addiction as an acute disorder to treating it as a chronic condition requires a shift in focus from the pathology of addiction to the nature of, and processes involved in, long term addiction recovery. It extends the concepts of “addiction career” and “treatment career” (Hser, et al., 1997) to encompass a third concept, “recovery career.” There are a number of concepts that constitute important building blocks in the construction of recovery-oriented systems of care for severe and persistent AOD problems.

- There are many pathways and styles of recovery (White, 1990, 1996) and many legitimate sobriety-based support structures. Recovery styles and viable support structures vary by developmental age, gender, ethnicity, social class, and profession and they vary by one’s “recovery capital” (the intrapersonal, interpersonal and community resources that can be brought to bear on the initiation and maintenance of recovery) (Granfield and Cloud, 1999).
- The mechanisms and processes that sustain recovery are different than the factors that initiate recovery (Humphreys, et al, 1995).
- Addiction recovery can be self-directed and incremental in nature (Prochaska, DiClimente, and Norcross, 1992), a process of unconscious “drift” (Granfield and Cloud, 1999), or a process of sudden, climactic transformation (Miller and de Baca, 2001).
- Addiction recovery most often involves a process of developmental change, the stages of which can be identified and to which stage-appropriate interventions can be designed and delivered (Brown, 1985; DiClimente, et al, 1992)
- Recovery can be professionally-guided (treatment), peer-guided (mutual support groups) or “solo”/“natural” (use of resources within the self and family/social network). Factors that distinguish those in the former from the latter include problem severity, co-morbidity, levels of family/social/occupational support, and social class (Sobell, et al, 1993; Sobell et al, 1996a; Larimer and Kilmer, 2000).
- Styles of recovery vary considerably based on whether one does or does not

incorporate addiction/recovery as a core element of personal identity, and whether one does or does not maintain active contact with other recovering people as a recovery maintenance activity. These dimensions of style may evolve through the stages of recovery.

- Recovery outcomes vary considerably in terms of primary and secondary drug consumption: abstinence, subclinical (nonproblematic) use, and problem reduction (partial recovery). Recovery outcomes also vary in the broader dimensions of global (cognitive, emotional, family, social, occupational) functioning.
 - Post-treatment outcomes are characterized by subgroups who: 1) sustain problematic use, 2) sustain uninterrupted abstinence, and 3) who in the weeks/months/years following treatment vacillate between problematic use, non-problematic use, and experiments in abstinence. Fluid states of addiction/recovery typified by this sizeable third group offer significant opportunities to enhance outcomes via recovery management models of intervention.
 - A vision of long term, staged recovery posits treatment and support services (e.g., harm reduction, motivational interviewing, pharmacological adjuncts, cognitive-behavioral therapies, mutual aid groups) not as competing and mutually exclusive technologies but as interventions that can be matched, not just to different individuals, but to the same individual at different stages of his or her addiction/recovery careers.

Because recovery-oriented systems of care are shifting from a treatment lexicon to a recovery lexicon, it will be tempting to view the recovery model as simply a new “buzz” word for treatment as usual. To do so would be a failure to recognize the quite fundamental conceptual and technical shifts implicit within the recovery model.

VI. Toward a Recovery-Oriented Model of Care

The shift from an acute treatment model to a recovery management model requires a fundamental redefinition of the service target; the nature, timing and duration of services; the locations in which services are delivered; the composition of the service delivery team, and the methods and criteria through which services are evaluated. We have been involved at many levels with recovery management models and believe the following are among the most significant of the changes in clinical practice that follow their implementation. We will focus this discussion on how the actual processes of service delivery change rather than on how the move to recovery-oriented systems of care will reshape health care policy and the organization and financing of such services.

1. Service Integration *Recovery management models seek to strategically combine and refine the resources of human service agencies, primary health care providers, and indigenous supports into an integrated system of care that can address stage-specific needs across the span of long term recovery.* Strategies of integration include the creation of multi-agency service delivery teams, cross-training of service professionals, and integrated (and often centralized) outreach, case management, and recovery support services. The primary mechanisms of service integration include a global assessment process/instrument, regular interdisciplinary conferences with the client/family, and the use of a single treatment/recovery plan that directs the allocation of resources drawn from multiple service institutions and indigenous support structures. There is growing evidence that integrated models of care are superior in terms of clinical outcomes and stewardship of community resources than are models that rely on either

parallel or serial models of treating chronic and co-occurring problems (Miller, 1994; RachBeisel, Scott and Dixon, 1999; Drake, et al., 1989; Drake, et al, 2001).

2. Identification and Engagement *Recovery management models utilize population-based identification strategies, assertive community outreach, low thresholds of service entry, multiple points of entry, patient registries, and seamless movement between levels of care to locate, engage, retain and re-engage people with AOD problems.* These interventions recognize and seek to work through the many sources of personal ambivalence and environmental obstacles that impede recovery. Engagement is viewed not as an event, but as a process that continues throughout the recovery management partnership.

The very things that are the hallmark of effective brief interventions--feedback of risk, emphasis on personal responsibility, prescriptive advice, a menu of change options, expression of empathy and encouragement, and enhancement of self-efficacy via expression of confidence in client's ability to change (Bien, Miller, and Tonigan, 1993) are all integrated within this process of engagement. Such outreach and engagement techniques have been found effective in initiating change in multiple populations: women, ethnic minorities, youth, and drug injectors (Brown and Needle, 1994).

3. Assessment *Assessment activities within recovery management models are a continuous rather than an intake activity, are global rather than categorical, and integrate traditional "treatment plans" into a larger "recovery plan."* The high degree of individual variability in AOD problems, the changing status of these problems over time, unique patterns of problem co-occurrence, and concerns regarding the misapplication of recovery management approaches all require rigorous, ongoing and global assessment activities. Global assessment assumes that the germination and development of severe AOD problems spring from multiple elements of the personal, family and cultural ecosystem and that the resources needed to resolve these problems are located within these same arenas.

Recovery management models integrate the traditional medical model "treatment plan" with the "recovery plan" utilized within social model alcoholism treatment programs (Borkman, 1998b). In contrast to a treatment plan, the recovery plan: 1) is prepared and regularly updated by the client, 2) documents the goals and planned activities of the client, and 3) covers such life domains of the client as finances, social life, legal difficulties, education, employment, and spirituality (Borkman, 1998a). Recovery management models provide a structured and individualized transition between professionally-directed treatment planning and self-directed recovery planning.

4. Definition of "Client" *In recovery management models, the definition of "client" shifts from the symptomatic individual to the family and cultural milieu and the individual nested within it.* In recovery management, family members and social network members are all co-providers of recovery support services and legitimate recipients of services in their own right. Recovery priming can occur by moving the family and social network toward greater health and understanding of addiction disease even without the symptomatic individual's direct participation. The focal point of action in the recovery management model is not on what the treatment professional does but on the client and family's capacity to self-direct their own recovery.

5. Service Goals *The mission of recovery management is to help each person suffering from addiction disease to achieve their optimal long term outcome (as measured by the quality*

and duration of life, achievement of personal goals, and his or her impact on family and society). Recovery management strategies are aimed at multiple stage-specific goals:

- slowing the speed of disease acceleration and the speed of decline in biopsychosocial functioning,
- initiating, strengthening and extending periods of symptom remission (reducing the number, intensity and duration of relapse events),
- preventing the onset of, or reducing the severity of, co-morbid conditions,
- producing full and sustained symptom remission where possible,
- achieving the maximum level of age (stage)--appropriate functioning and health for the individual/family, and
- reducing the personal, family and social costs associated with addiction and recovery management.

The focus of recovery management is on reducing addiction-related mortality, decreasing the duration and degree of addiction-related incapacitation, and promoting the development of long term processes of disease stabilization and recovery. Recovery management services seek to enhance the capacity of each client/family to achieve their highest degree of functioning, regardless of whether that level is one of full or partial recovery.

6. Service Scope and Technologies *For clients whose patterns of AOD use reflect chronicity and severity, the best strategy for long term recovery is proactive engagement, disease stabilization (acute treatment), recovery management education, ongoing recovery support, monitoring with feedback, and, when necessary, early re-intervention and re-stabilization.* Recovery management doesn't so much replace the acute model as much as wrap that model in a larger continuum of support services and shift the focus from one of treating the acute manifestations of addiction to building a life of recovery.

These "recovery support services" focus on eliminating barriers to recovery and on enhancing what Granfield and Cloud (1999) have christened "recovery capital"—the intrapersonal, interpersonal and environmental resources that can be drawn upon to aid recovery. Such services encompass traditional clinical services but extend further into such areas as sober housing, pro-recovery educational and employment opportunities, day care and transportation services, and pro-recovery leisure activity. The essence of recovery management involves sustained monitoring of the status of a chronic disease, sustained monitoring of the effectiveness of recovery management strategies, and continual, stage-appropriate refinements in recovery support services.

7. Timing and Duration of Services *The temporal focus of recovery management services is on interrupting the acceleration of AOD problems before the crises that generally initiate acute treatment episodes and sustaining support long after such episodes are traditionally defined as completed.*

By metaphorically changing the role of the addiction treatment specialist from that of an emergency room physician to that of a primary physician managing the long-term course of diabetes or hypertension, the recovery management model renders the concepts of "discharge" and "aftercare" anachronistic. In the recovery management model, all care is an element of continuing care. Continued telephonic, electronic (e-mail) and postal delivery of recovery education; monitoring; support; and, where needed and desired by the client and not otherwise available in the community, ongoing face-to-face group and individual support, are routine

elements of the recovery management model. Within this model, intensity of services decrease over time but the commitment to and access to sustained recovery support remains constant.

8. Delivery Locus *The locus of service activity within the recovery management model combines the primary health care institution (the inpatient/residential institution and the centralized outpatient clinic) with home-based, neighborhood-based service delivery, with a particular emphasis on the latter.* Two principles—personal autonomy and pro-recovery social support—guide recovery management models. First, persons suffering from AOD problems and addictive diseases seeking help are served within the least restrictive, least isolating and least coercive environments and methods possible. Second, transfer of learning is directly related to the degree of physical, psychological, and cultural distance between service delivery site and the client’s natural environment. In the recovery management model, services are delivered as close as possible to the natural living environment of the client. Any isolation of the client from that environment is accompanied by intensive transition services aimed at transferring learning from the institutional environment to the client’s natural environment. In the recovery management model, as much effort is spent focusing on developing ecosystem supports for recovery as is spent on focusing on pro-recovery, intrapersonal changes.

9. Service Relationship *With recovery management, the service relationship shifts from a “dominator model” to a “partnership model.”* The traditional relationship between addiction treatment providers is time-limited, hierarchical, and commercialized. Power, status and strength lie on one side of the relationship and stigma, powerlessness and problems lie on the other side. The patient seeks the help of the expert who diagnoses the patient, prescribes what the patient must do to get well, and then seeks to manipulate the patient’s compliance.

Recovery management replaces this expert-centered service relationship with what Eisler (1987) has characterized as a “Partnership Model” and what Lazarus (2001) has characterized as “consumercentric care.” The focus is on creating a collaborative alliance that shifts the focus of recovery from the treatment professional to the person seeking and experiencing recovery. The service professional shifts from the roles of diagnostician and “treater” to the roles of long term ally and recovery consultant. One of the essential dimensions of recovery management is continuity of contact over time in a primary service relationship.

This partnership requires the deep involvement of clients in the design, implementation, and evaluation of services. In the recovery management model, treatment professionals and their institutions become students and allies of the growing consumer/survivor movement in the United States (Anthony, 1993; Kaufmann, 1999; Chamberlin, 1990; White, 2000c). The recovery management model could help the field of addiction treatment face in the twenty-first century what it has never faced in its history: a strong consumer movement led by recovering people/families who are knowledgeable, articulate, well-organized, and angry at their historical exclusion from policy and clinical decision-making.

10. The Role of Community in Recovery *The goal of recovery management is not to forever enmesh all persons with severe and persistent AOD problems in professionally-directed treatment services; it is to open resources in the wider community that will enhance each client’s own capacity for recovery self-management. The goal is to help nest the client within a physical, psychological and social space where long term recovery can be nurtured. This involves enmeshing the client in recovery-supportive relationships that are natural (rather than professionalized), enduring (rather than transient) and reciprocal (rather than fiduciary and commercialized).*

The community, when organized and educated, can be a reservoir of hospitality and support for recovering people. Professionally directed treatment services should be the last, not the first, line of defense in the management of chronic addictive diseases. The first lines of resources for the management of alcohol and other drug problems consists of the individual's own natural resiliencies, family and intimate social networks, and other non-professional support systems within the individual's natural environment. Interventions that inadvertently undermine and replace the natural support functions of the self, the family, and the community with professionalized and commercialized supports fail both on technical and ethical grounds (McKnight, 1995).

11. The Recovery Management Team *The recovery management model places greater emphasis on the use of the client, his or her family, natural helping systems within the community, and on indigenous recovering people within the recovery management team.* In the future, many recovery support services will be provided by recovered and recovering persons and by recovery-based service organizations which will utilize recovering individuals, family members and other "folk healers" from within the community as recovery support specialists. Such individuals will fill both volunteer and paid staff positions.

12. Service Evaluation *The evaluation of recovery management strategies involves the client/family as the primary evaluator, measures client/family functioning over a much longer (5-15 years) period of time (Vaillant, 1983), and assess the synergistic interaction and cumulative effects of multiple interventions. If the transition to a recovery management model is achieved, addiction treatment and recovery support services will be judged by the same standards that are used to evaluate the treatment and management of other chronic diseases (as advocated by O'Brien and McLellan, 1996).*

The essence of the acute care model is to deliver a single treatment episode, and then to evaluate that episode based on symptom remission or reactivation during the months following "discharge" from that service episode. In contrast, the recovery management model assumes that a return of symptoms following a single treatment episode does not mean that a particular intervention was a failure, nor that sustained remission following an intervention reflects success where earlier episodes had failed. Recovery management models assume that symptom remission or relapse can occur independent of service interventions and that interventions can have delayed, cumulative or synergistic effects. The focus thus shifts to evaluating extra-treatment factors as well as evaluating particular combinations and sequences of interventions as they interact with the evolving life of the client/family.

Recovery management models include consumer participation and use of consumer-influenced evaluation criteria (Sloves, 2000). Like the assessment process, evaluation shifts from an end-of-service-episode or follow-up event to a continuous process and shifts from a categorical evaluation (focus on presence or absence of alcohol/drug use) to a global evaluation (focus on the health, quality of life and social functioning of the individual/family as well as the impact of intervention on the community, e.g., social costs, reduced threats to public safety).

VII. Pitfalls

The chronic disease recovery management model described in this paper is not without its potential pitfalls.

Funding: Virtually all funding of addiction treatment is currently set up to reimburse episodes of acute care provided by categorically segregated service specialists. A shift to the recovery management model will require population-based funding for longitudinal care

delivered by multiple providers organized into integrated systems of care (Pawlson, 1994). Fundable services will need to include outreach, early intervention, case management, monitoring, harm reduction services, and a broad spectrum of recovery support services. There is a danger that the recovery management model could be manipulated by funding organizations to eliminate high intensity/high cost components of service continuum. There is also a danger that a greater responsibility for recovery support could be shifted to the community while all the financial resources remain within professional agencies and managed care entities.

Service Capacity: The shift from an acute intervention to a recovery management model will require new strategies for defining and managing service. Recovery management will require larger caseloads as service professionals maintain contact with a mix of people in widely varying stages of recovery. The increased numbers of people will be mirrored by a smaller percentage of clients with high intensity service demands. This will require new systems of defining and managing service caseloads.

Stigma and Therapeutic Pessimism: If not handled with great care, the “chronicity” language may undermine belief in the potential for permanent resolution of addiction (Brown, 1998). We feel very strongly that the presentation of this model needs to be framed as “recovery management” and not “chronic disease management” to both consumers and the community. We must be able to convey two messages: 1) uninterrupted remission of addiction is possible and a reality in the lives of hundreds of thousands of people, and 2) active recovery management can reduce the frequency, intensity and duration of relapse episodes as it enhances the quality of life and global functioning of those persons who have yet to achieve uninterrupted sobriety.

Iatrogenic Effects from Model Misapplication: There is a danger that a chronic disease management model will be misapplied to individuals whose AOD problems represent not chronic disorders but transient problems that will quite likely spontaneously remit with time and maturation or respond to brief intervention. The potential indiscriminate application of a chronic disease management model to children and adolescents presenting with AOD use is of particular concern.

Service Provider Accountability: “Chronic Disease” could become a shroud that hides and decreases the accountability of service providers for clinical outcomes. Service providers cannot be allowed to blame clients and the nature of their disorder on poorly designed and executed service technologies. Recovery management models should be subjected to more, not less, accountability for long term clinical outcomes (Brown, 1998).

Financial Exploitation: The chronic disease / recovery management model could be financially exploited by treatment institutions who “capture” a population of chronic alcoholics/addicts and provide a high frequency of long term billable services rather than linking these clients to indigenous resources that would diminish their need for these agency-provided services.

Ethical Dilemmas: The recovery management model raises a whole spectrum of ethical issue that will need to be addressed. These include:

- What is the boundary between appropriately assertive outreach and inappropriately intrusive outreach (“stalking”)?
- When are we doing too much or too little?
- What relationship boundaries should guide this prolonged “partnership” with clients/families?
- Does a client have the right to not be “monitored and managed?”
- Who is the client (when an agency is contracted to provide prolonged case management services to reduce a client’s threat to public safety or to reduce the

client's consumption of scarce community resources)?

From Dynamic to Static Model: There is a danger that clinical care guidelines used within the recovery management model could reduce the treatment of complex disorders to “cookbook medicine.” This is not a rationale for avoiding evidence based practice guidelines, but a caution that an adequate “toolbox” must be complemented with clinical training and clinical supervision to assure proper clinical judgement in applying techniques in an individualized manner.

Staff Support: In an acute care model, staff working with the most difficult of clients take solace from the fact that this involvement is short term and will be replaced in a few weeks with a new, perhaps less difficult client. The recovery management model will place staff in contact with these most difficult clients for much more prolonged periods of time. Without special supports (clinical supervision, team models of service delivery, etc.), this model could face challenges related to staff morale and retention. Continuity of contact is crucial to the success of the recovery management model; staff turnover must be kept at a low level.

VIII. Summary

Chronic diseases possess many characteristics that distinguish them from acute disorders. They tend to have complex etiologies in which behavioral choices play a role in symptom onset, severity and duration. Their courses are prolonged and often characterized by periods of remission and relapse. They lack definitive cures but can be effectively managed by combinations of interventions. Although severe AOD problems have long been characterized as chronic diseases, their treatment has more closely resembled acute care interventions. The shift to a (chronic disease) recovery management model will require changing our very understanding of the nature of severe and persistent AOD problems and changing the timing and duration of service intervention, the composition of the service delivery team and the methods and criteria used to evaluate our interventions into these problems.

While traditional models of care will continue to meet the needs of many individuals who have sufficient “recovery capital” to resolve their AOD-related problems through a single episode of care, clients who do not respond to such acute care will require recovery management models that sustain contact longer and place greater emphasis on recovery education, long-term monitoring and support, and early re-intervention. The potential pitfalls in this shift toward recovery management models include the demands that will be required to change how services are funded and organized, the potential misapplication of chronic disease models to persons whose AOD-related problems are transient in nature, and the need to manage new and complex ethical issues that will arise within the context of long term service relationships. Models of recovery management offer great promise in the future treatment of severe and persistent alcohol and other drug problems. We must be careful, however, in reaching for this future to not lose what is most valuable within the current system of care.

References

- American Society of Addiction Medicine & National Council on Alcoholism and Drug Dependence. (1976). Disease definition of alcoholism. *Annals of Internal Medicine* 85(6):764.
- American Society of Addiction Medicine & National Council on Alcoholism and Drug Dependence. (1990). Disease definition of alcoholism revised. Joint News Release, April 26.

- Anderson, D. (1942). Alcohol and public opinion. *Quarterly Journal of Studies on Alcohol*, 3(3):376-392.
- Anthony, W.A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16:11-23.
- Benezet, A. (1774). *The Mighty Destroyer Displayed (in some account of the dreadful havoc made by the mistaken used as well as abuse of spiritous liquors)*. Philadelphia: Joseph Crukshank.
- Bien, T., Miller, W., and Tonigan, S. (1993). Brief interventions for alcohol problems: A review. *Addiction*, 88:315-336.
- Borkman, T. (1998a). Is recovery planning different from treatment planning? *Journal of Substance Abuse Treatment*, 15(1):37-42.
- Borkman, T. (1998b). Borkman, T., Kaskutas, L., Room, J., Bryan, K. and Barrows, D. (1998). A historical and developmental analysis of social model programs. *Journal of Substance Abuse Treatment* 15:7-17.
- Boyle, M.; White, W.; Loveland, D.; Godley, M.; and Hagen, R. (2000). The Behavioral Health Recovery Management project: Project summary and concept. www.bhrm.org.
- Brown, B.S. (1998). Drug use: Chronic and relapsing or a treatable condition? *Substance Use and Misuse*, 33(12):2515-2520.
- Brown, H. (1872). *An Opium Cure: Based on Science, Skill and Matured Experience*. New York: Fred M. Brown & Co. (Advertising Book for Antidote and Restorative) In: Grob, G. (1981). *American Perceptions of Drug Addiction*. New York: Arno Press.
- Brown, B. and Needle, R. (1994). Modifying the process of treatment to meet the threat of AIDS. *International Journal of the Addictions*, 29:1739-1752.
- Brown, S. (1985). *Treating the Alcoholic: A Developmental Model of Recovery*. New York: Wiley.
- Chamberlin, J. (1990). The ex-patients' movement: Where we've been and where we're going. *The Journal of Mind and Behavior*, 11:323-336.
- Chou, S.P. and Pickering, R.P. (1992). Early onset of drinking as a risk factor for lifetime alcohol-related problems. *British Journal of Addiction*, 87:1199-1204.
- Cook, C. (1988). Minnesota Model in the management of drug and alcohol dependency: Miracle, method or myth? Part I. The philosophy and the programme. *British Journal of Addiction*, 83(6):625-634.
- Crothers, T.D. (1879). Editorial: Practical value of inebriate asylums. *Journal of Inebriety* 3(4):249.
- Crothers, T.D. (1893). *The disease of inebriety from alcohol, opium and other narcotic drugs*. New York: E.B. Treat, Publisher.
- DiClemente, C.C.; Carbonari, J.P.; & Velasquez M.M. (1992). Treatment mismatching from a process of change perspective. In: R.R. Watson, Ed., *Alcoholism Treatment Mismatching from a Process of Change Perspective. Drug and Alcohol Abuse Reviews, Vol. 3: Alcohol Abuse Treatment*, pp 115-142. Totowa, NJ: The Humana Press.
- Dole, V. (1988). Implications of methadone maintenance for theories of narcotic addiction. *Journal of the American Medical Association*, 260(20):3025-3029.
- Dole, V. (1997). What is "methadone maintenance treatment"? *Journal of Maintenance in the Addictions*, 1(1):7-8.
- Drake, R.E. and Wallach, M.A. (1989). Substance abuse among the chronically mentally ill. *Hospital and Community Psychiatry*, 40(10):1041-1045.
- Drake, R.E., Mercer-McFadden, C., Muesser, K.T., McHugo, G.J., and Bond, G.R. (1998). A review of integrated mental health and substance abuse treatment for patients with dual disorders. *Schizophrenia Bulletin*, 24:589-608.

- Drake, R.E. and Wallach, M.A. (2000). Dual diagnosis: 15 years of progress. *Psychiatric Services*, 51:1126-1129.
- Drake, R.E., Essock, S.M., Shaner, A., Carey, K.B., Minkoff, K., Kola, L., Lynde, D., Osher, F.C., Clark, R.E., and Rickards, L. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52(4):469-476.
- Eisler, R. (1987). *The Chalice and the Blade: Our History, Our Future*. Cambridge, MA: Harper and Row.
- Ethridge, R.M., Craddock, S.G., Dunteman, G.H., and Hubbard, R.L. (1995). Treatment services in two national studies of community-based drug abuse treatment programs. *Journal of Substance Abuse*, 7:9-26.
- Fingarette, H. (1989). *Heavy Drinking: The Myth of Alcoholism as a Disease*. Berkeley: University of California Press.
- Goodheart, C.D. and Lansing, M.H. (1997). *Treating People with Chronic Disease: A Psychosocial Guide*, American Psychiatric Association.
- Granfield, R. and Cloud, W. (1999). *Coming Clean: Overcoming Addiction without Treatment*. New York: New York University Press.
- Grant, B.F. and Dawson, D.A. (1997). Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence. *Journal of Substance Abuse*, 9:103-110.
- Hser, Y-I, Anglin, M.D., Grella, C., Longshore, D., and Pendergast, M. (1997). Drug treatment careers: A conceptual framework and existing research findings. *Journal of Substance Abuse Treatment*, 14(6):543-558.
- Humphreys, K., Moos, R. H., & Finney, J. W. (1995). Two pathways out of drinking problems without professional treatment. *Addictive Behaviors*, 20, 427-441.
- Johnson, B. (1973). *The Alcoholism Movement in America: A Study in Cultural Innovation*. Urbana, IL: University of Illinois, Ph.D. Dissertation.
- Kaplan, L. (1997). A Disease management model for addiction treatment. *Behavioral Health Management*, 17(4):14-15.
- Kaufmann, C. L. (1999). An introduction to the mental health consumer movement. In: A. Horwitz & T. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems*. Cambridge: Cambridge University Press, pp. 493-507.
- Labouvie, E., Bates, M.E., and Pandina, R.J. (1997). Age of first use: its reliability and predictive utility. *Journal of Studies on Alcohol*, 58:638-43.
- Larimer, M. E., Kilmer, J. R. (2000). Natural history. In G. Zernig, A. Saria, M. Kurz, & S. S. O'Malley, *Handbook of Alcoholism*. Boca Raton, FL: CRC Press.
- Lazarus, A. (2001). Economic grand rounds: The promise of disease management. *Psychiatric Services*, 52(2):169-171.
- Lebowitz, B.D., Harris, H.W. (2000). Efficacy and effectiveness: From regulatory to public health models. In: I. Katz & D. Oslin (Eds.), *Annual review of gerontology and geriatrics: Focus on psychopharmacologic interventions in late life* (vol. 19). New York: Springer, pp. 3-12.
- Leshner, A.I. (1997). Addiction is a brain disease, and it matters. *Science*, 278:45-47.
- Levine, H. (1978). The discovery of addiction: Changing conceptions of habitual drunkenness in America. *Journal of Studies on Alcohol*, 39(2):143-174.
- Lewis, D.C. (1993). A disease model of addiction. In: Miller, N.S., Ed., *Principles of Addiction Medicine*. Chevy Chase, MD: American Society on Addiction Medicine, pp. 1-7.
- Mann, M. (1944). Formation of a National Committee for Education on Alcoholism. *Quarterly Journal of Studies on Alcohol*, 5(2):354.
- Marcet, W. (MD) (1868). *On Chronic Alcoholic Intoxication*. New York: Moorhead, Simpson, & Bond, Publishers.
- McElrath, D. (1997). Minnesota model. *Journal of Psychoactive Drugs*, 29(2):141-144.

- McLellan, A.T., Lewis, D.C., O'Brien, C.P, and Kleber, H.D. (2000). Drug dependence, a chronic medical illness: Implications for treatment, insurance, and outcomes evaluation. *Journal of the American Medical Association* 284(13):1689-1695.
- McNight, J. (1995). *The careless society: Community and its counterfeits*. New York: Basic Books.
- Miller, N, (1994). Psychiatric comorbidity: Occurrence and treatment. *Alcohol Health and Research World*, 18(4):261-264.
- Miller, W. and C' de Baca, J. (2001). *Quantum Change: When Epiphanies and Sudden Insights Transform Ordinary Lives*. New York: Guilford Press.
- Minkoff, K. (1989). An integrated treatment model of dual diagnosis of psychosis and addiction.
- Mitchell, D, Mitchell, C. and Ofshe, R. (1980). *The Light on Synanon*. Wideview Books.
- Nicassio, P.M. and Smith, T.W. (Eds.) (1995). *Managing chronic illness: A biopsychosocial perspective*. Washington, DC: American Psychological Association
- Norquist, G., Lebowitz, B., and Hyman, S. (1999). Expanding the frontier of treatment research. *Prevention and Treatment*, 2 [On line], Available: <http://journals.apa.org/prevention/volume2/pre0020001a.html>
- O'Brien, C. and McLellan, T. (1996). Myths about the Treatment of Addiction. *Lancet*, 347:237-240.
- Osher, F. (1996). A vision for the future: Toward a service system responsive to those with co-occurring addictive and mental disorders. *American Journal of Orthopsychiatry*, 66:71-76.
- Parrish, J. (1883). *Alcoholic Inebriety: From a Medical Standpoint*. Philadelphia: P. Blakiston, Son & Company.
- Pawlson, L. (1994). Chronic illness: Implications of a new paradigm for health care. *Journal of Quality Improvement*, 20(1):33-39.
- Peele, S. (1989). *The Diseaseing of America*. Lexington, MA: Lexington Books.
- Peele, S. And Brodsky, A. with Arnold, M. (1992). *The Truth about Addiction and Recovery*. NY: Simon and Schuster.
- Prochaska, J., DiClemente, C. and Norcross, J. (1992). In search of how people change. *American Psychologist*, 47:1102-1114.
- RachBeisel, J, Scott, J., and Dixon, L. (1999) Co-occurring severe mental illness and substance use disorders: A review of recent research. *Psychiatric Services*, 50(11):1427-1434.
- Roizen, R. (1991). *The American Discovery of Alcoholism, 1933-1939*. Ph.D. Dissertation. Berkeley: University of California.
- Rolland, J. (1987). Chronic illness and the life cycle: A conceptual framework. *Family Process*, 145:203-221.
- Rorabaugh, W. (1979). *The Alcoholic Republic: An American Tradition*. Oxford: Oxford University Press.
- Rush, B. (1814). *An Inquiry into the Effect of Ardent Sirits upon the Human Body and Mind, (with an account of the means of preventing and of the remedies for curing them)*, 8th rev. ed. Brookfield: E. Merriam & Co.
- Schaler, J. (2000). *Addiction is a Choice*. Chicago: Open Court.
- Simpson, D.D., Joe, G.W., and Lehman, W.E. (1986). *Addiction careers: Summary of studies based on the DARP 12-year follow-up*. National Institute on Drug Abuse. Treatment Research Report (ADM 86-1420).
- Sloves, H. (2000). Reintegration: New technologies and the new consumer social services market transforms consumers Into consumers. www.foun-tainhouse.org.
- Sobell, L. C., Sobell, M. C., Toneatto, T., & Leo, G. I. (1993). What triggers the resolution of alcohol

- problems without treatment? *Alcoholism: Clinical and Experimental Research*, 17, 217-224.
- Sobell, L. C., Cunningham, J. A., & Sobell, M. B. (1996a). Recovery from alcohol problems with and without treatment: Prevalence in two population surveys. *American Journal of Public Health*, 86, 966-972.
- Spicer, J. (1993) *Minnesota model: The evolution of the multidisciplinary approach to addiction recovery*. Center City, MN: Hazelden Educational Materials.
- Starfield, B. (1974). Assessment of morbidity. In: Grave, D., Pless, I.H., Eds. *Chronic Childhood Illness: Assessment and Outcome*. Washington, D.C.: US Department of Health, Education and Welfare.
- Stein, R.; Bauman, L.; Westbrook, L.; Coupney, S; and Ireys, H. (1997). Framework for identifying children who have chronic conditions: The case for a new definition. *The Journal of Pediatrics*, 122(3):342-347.
- Sweetser, W. (1828). *A Dissertation on Intemperance, to which was awarded the premium offered by the Massachusetts Medical Society*. Boston: Hilliard, Gray, and Company.
- Vaillant, G. (1983). *The Natural History of Alcoholism: Causes, Patterns, and Paths to Recovery*. Cambridge, Massachusetts: Harvard University Press.
- White, W. (1990, 1996). *Pathways from the Culture of Addiction to the Culture of Recovery*. Center City, MN: Hazelden.
- White, W. (In Press). The lessons of language: Historical perspectives on the rhetoric of addiction. *Altering American Consciousness: Essays on the History of Alcohol and Drug Use in the United States, 1800-1997*. In: Tracy, S. and Acker, C., Eds. Amherst, MA: University of Massachusetts Press.
- White, W. (1998). *Slaying the Dragon: The History of Addiction Treatment and Recovery in America*. Bloomington, IL: Chestnut Health Systems.
- White, W. (2000a). Addiction as a disease: The birth of a concept. *The Counselor*, 1(1):46-51, 73.
- White, W. (2000b). The rebirth of the disease concept of alcoholism in the 20th Century. *The Counselor*, 1(2):62-66.
- White, W. (2000c). Toward a new recovery movement: Historical reflections on recovery, treatment and advocacy. Presented at the Center for Substance Abuse Treatment Recovery Community Support Program Conference, April 3-5, 2000, posted at www.treatment.org and www.defeataddiction.org
- White, W. (2001a). Addiction disease concept: Advocates and critics *The Counselor*, 2(1):42-46.
- White, W. (2001b). An addiction disease concept for the 21st Century. *The Counselor*, 2(2):44-52.
- White, W. (2001c). A lost vision: Addiction counseling as community organization. *Alcoholism Treatment Quarterly*. Accepted for publication.
- White, W. (2001d). Pre-AA alcoholic mutual aid societies. *Alcoholism Treatment Quarterly*. 19(2):1-21.
- Woodward, S. (1838). *Essays on asylums for inebriates*. Worcester, Massachusetts.