



Mental Health & Recovery Board
of Clark, Greene & Madison Counties

Help for Today. Hope for Tomorrow.

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**COMBINED MENTAL HEALTH AND ALCOHOL
& DRUG COMMITTEES MEETING**

**Tuesday, September 13, 2011
5:30 – 7:00 P.M.**

CHAIRS: JULIE ANTHONY & BEN HARRISON

**GREENE COUNTY EDUCATIONAL SERVICE CENTER
360 EAST ENON ROAD
YELLOW SPRINGS, OH 45387**

AGENDA

- I. Welcome and Introductions
- II. Risk Pool Priorities and Procedures Attachment A
- III. Mental Health Services for Clark and Madison Counties Attachment B
- IV. TCN Behavioral Health Services
 - A. Additional Behavioral Health Services Attachment C
 - B. Integrated Health Services Attachment D
- V. Rocking Horse Center Attachment E
Early Childhood Mental Health Consultation
- VI. TCN Behavioral Health Services Attachment F
Reimbursement for Heat Treatment
- VII. New ASAM (American Society of Addiction Medicine) Attachment G
Addiction Definition
- VIII. Miscellaneous
- IX. Adjournment

The Mental Health and Alcohol/Drug Committee is an open meeting and everyone is welcome to attend.

FY2012 RISK POOL PRIORITIES AND PROCEDURES

To help address the possibility of personal or community risk resulting from reductions in ODMH and ODADAS non-Medicaid funding and imposition of Medicaid limits, the Mental Health & Recovery Board (MHRB) has established Risk Pools in Clark, Greene, and Madison Counties. We anticipate the Risk Pools will be available in FY2012 and 2013. Each Risk Pool is county specific. Only full MHRB contract agencies are eligible to request access to the Risk Pools according to the following procedures and priorities.

The following priorities have been established by action of the MHRB.

Mental Health

Adults with Severe and Persistent Mental Illness including Schizophrenia, Bi-polar disorder, and Major Depression and youth with Severe Emotional Disturbance including transitional aged youth moving into adult services. Pharmacological Management, CPST, and Behavioral Health Counseling are considered to be equal priority services.

AOD

Individuals who inject drugs and/or are dependent on opiates, pregnant women, and parents at risk of losing custody of their children due to a substance use disorder are considered priority populations. Within each priority population, the medically indigent shall receive priority for alcohol and other drug services. Pregnant women shall be given preference in admission to treatment services. Medication assisted treatment (OAC 3793:2-1-08 (BB)) is a priority service. MHRB providers of alcohol and other drug treatment services are to follow the ODADAS Level of Care protocol in the placement of clients and delivery of services.

The following procedures have been established to request access to Risk Pool funding.

Medicaid Funded Services

- I. To request access to Risk Pool funding for Medicaid funded services the following procedure must be followed:
 - a. The Medicaid service limits must either exceed or be projected to exceed the Medicaid limits within the near future.
 - b. A request for authorization to provide services beyond the Medicaid limit must be requested and the request must have been denied.
 - c. The requesting agency must demonstrate medical necessity or other need vital to personal or community safety.
 - d. The anticipated level of needed services (number of units) must be presented including the length of time over which the services will be provided. For example, "It is anticipated that client A will continue to need two hours of CPST weekly for the next 10 weeks".
 - e. Only services and populations within the MHRB's priorities will be considered.
 - f. Requests for several clients can be made simultaneously but each client must be identified individually.
 - g. MHRB staff will make final determinations regarding approval requests.

Non-Medicaid Funded Services

- II. To request access to Risk Pool funding for non-Medicaid funded services the following procedures must be followed:
 - a. The Board allocation for the service must be at least 80% expended.
 - b. The requesting agency must demonstrate medical necessity or other need vital to personal or community safety.
 - c. The anticipated level of needed services (number of units) must be presented including the length of time over which the services will be provided. For example, "It is anticipated that client A will continue to need two hours of Individual Counseling weekly for the next 10 weeks".
 - d. Only services and populations within the MHRB's priorities will be considered.
 - e. Requests for several clients can be made simultaneously but each client must be identified individually.
 - f. MHRB staff will make final determinations regarding approval requests.

IT IS THE RECOMMENDATION OF THE COMBINED MENTAL HEALTH AND ALCOHOL AND DRUG COMMITTEES THAT THE MENTAL HEALTH & RECOVERY BOARD OF CLARK, GREENE, AND MADISON COUNTIES ADOPT THE FY2012 RISK POOL PRIORITY POPULATIONS, SERVICES, AND PROCEDURES AS DEFINED BELOW IN THE DOCUMENT TITLED "FY2012 RISK POOL PRIORITIES AND PROCEDURES".

**ADDITIONAL FY 2012 ALLOCATION
MENTAL HEALTH SERVICES FOR CLARK AND MADISON COUNTIES**

IT IS THE RECOMMENDATION OF THE COMBINED MENTAL HEALTH AND ALCOHOL AND DRUG COMMITTEES THAT THE MENTAL HEALTH & RECOVERY BOARD OF CLARK, GREENE, AND MADISON COUNTIES ALLOCATE AN ADDITIONAL \$107,609 IN FY 2012 FOR PROVIDING ASSESSMENT AND INDIVIDUAL COUNSELING TO INDIVIDUALS WHO ARE NOT ELIGIBLE FOR MEDICAID. IT IS ESTIMATED THAT APPROXIMATELY \$76,000 WILL BE USED FOR CLARK COUNTY AND \$31,000 FOR MADISON COUNTY. THE GRID BELOW SHOWS THE BREAKDOWN BY COUNTY.

	Assessment Units	Individual Counseling Units
Clark	260	3,200
Madison	260	1,080
Total Additional Units	520	4,280

**MENTAL HEALTH SERVICES FOR CLARK AND MADISON COUNTY
FISCAL YEAR 2012 - REVISED**

Mental Health	Board Rate	Clark		Madison		Total Amount
		Units	Amount	Units	Amount	
Pharmacological Mgt.	210.22	11,240	300,600	2,150	66,814	367,414
MH Assessment (non-physician)	129.99*	3,838	176,278	1,308	58,989	235,267
Psychiatric Diagnostic Interview	210.87*	26	100	-	-	100
BH Counseling and Therapy (Ind)	22.50*	41,936	282,120	14,680	75,222	357,342
BH Counseling and Therapy (Gp)	9.87*	6,560	8,000	2,100	2,400	10,400
Crisis Intervention	154.35*	3,750	485,800	416	40,500	526,300
Partial Hospital	116.81*	8,100	369,672	700	10,500	380,172
CPST (Ind)	21.33*	79,200	305,000	13,680	30,000	335,000
CPST (Gp)	9.81*	43,680	163,000	17,472	10,000	173,000
Consultation	67.97	-	-	320	6,000	6,000
Other (Payee)	98.38	1,490	109,300	-	-	109,300
Community Residence	***	10,500	-	2,600	-	-
FMR-Client Fees			93,320		11,450	104,770
Staffing			145,800		17,890	163,690
Admin			41,965		5,150	47,115
Housing Pool			21,915		2,696	24,611
Residential Care	144.95	4,654	628,240		-	628,240
Inpatient Services	773.09	4,170	650,000	119	86,999	736,999
Subtotal		219,144	3,781,110	55,545	424,610	4,205,720
Alcohol and Other Drug						
Assessment	96.24*	208	4,000	96	15,000	19,000
Case Management	78.17*	-	-	208	1,200	1,200
Crisis Intervention	129.59*	6	100	21	400	500
Group Counseling	9.52*	1,460	4,000	4,652	2,000	6,000
Individual Counseling	21.82*	776	10,000	1,020	36,000	46,000
Intensive Outpatient	136.90*	288	1,000	456	67,000	68,000
Subtotal		2,738	19,100	6,453	121,600	140,700
TOTAL		221,882	3,800,210	61,998	546,210	4,346,420

*Medicaid Ceiling Rate, Agency budgeted rate is:

\$134.43 for MH Assessment (non-physician)
 \$219.00 for Psychiatric Diagnostic Interview
 \$24.21 for BH Counseling and Therapy (Ind)
 \$11.48 for BH Counseling and Therapy (Gp)
 \$170.07 for Crisis Intervention MH Services
 \$147.47 for MH Partial Hospitalization
 \$21.81 for CPST (Ind)

\$10.09 for CPST (Gp)
 \$112.65 for AOD Assessment
 \$130.04 for AOD Crisis Intervention
 \$78.71 for AOD Case Management
 \$25.47 for AOD Individual Counseling
 \$155.71 for AOD Intensive Outpatient
 \$9.67 for AOD Group Counseling

***Fair Market Rent (FMR)-Client Fees

Community Beds \$11/day
 Bed & Board \$20/day
 Personal Care \$35/day

**ADDITIONAL BEHAVIORAL HEALTH SERVICES
TCN BEHAVIORAL HEALTH SERVICES
FISCAL YEAR 2012**

TCN Behavioral Health Services serves Greene County youth and adults with mental illness and alcohol/drug addiction. TCN proposes to use this additional allocation to increase pharmacological service access by 480 hours (0.23 FTE) of psychiatric care for youth and adults.

IT IS THE RECOMMENDATION OF THE ALCOHOL/ DRUG AND MENTAL HEALTH COMMITTEES THAT THE MENTAL HEALTH & RECOVERY BOARD OF CLARK, GREENE AND MADISON COUNTIES ALLOCATE AN ADDITIONAL \$47,801 IN FY2012 TO TCN BEHAVIORAL HEALTH SERVICES, INC. FOR INCREASED PSYCHIATRY SERVICES.

Service	Units
Psychiatric Evaluation	63
Pharmacological Management	250
Total	313

TCN Behavioral Health Services, Inc.

FISCAL YEAR 2012 - REVISED

Mental Health	Board Rate	Adult		Youth		Total Amount
		Units	Amount	Units	Amount	
Pharmacological Mgt.	206.30	7,472	459,880	2,688	63,044	522,924
Mental Health Assessment (non-physician)	127.42	1,342	69,627	1,169	7,116	76,743
Psychiatric Diagnostic Interview (Physician)	210.87*	921	68,666	335	3,519	72,185
BH Counseling and Therapy (Ind.)	22.50*	17,722	132,345	22,294	31,373	163,718
BH Counseling and Therapy (Gp.)	8.20	10,716	33,430	3,578	1,573	35,003
Crisis Intervention MH Services	154.35*	78	4,120	214	4,419	8,539
Partial Hospitalization	116.81*	779	53,991	3,014	23,703	77,694
CPST (Ind.)	21.33*	61,152	240,012	5,517	11,566	251,578
Other MH(Psych Professional)	257.36	905	48,664	-	-	48,664
Consultation	81.73	832	60,758	296	21,645	82,403
Other MH Svc.(Food)	-	-	7,500	-	-	7,500
Residential Care	122.98	7,756	863,843	-	-	863,843
Inpatient Psychiatric service	-	-	160,000	-	-	160,000
Subtotal		109,675	2,202,836	39,105	167,958	2,370,794
Alcohol and Other Drug						
Assessment	96.24*	1,560	124,205	416	8,299	132,504
Case Management	78.17*	702	33,935	156	1,558	35,493
Group Counseling	4.61	36,953	131,710	5,391	4,153	135,863
Individual Counseling	21.82*	3,515	67,518	2,288	8,208	75,726
Intensive Outpatient	50.44	5,347	208,233	281	1,836	210,069
Laboratory Urinalysis	39.04	354	9,508	-	-	9,508
Medical Somatic	176.28*	575	57,785	-	-	57,785
Urine Dip Screen	18.00	2,904	60,222	499	5,620	65,842
Non-Medical Community Residential	140.48	4,964	619,065	-	-	619,065
Consultation	86.71	832	64,460	-	-	64,460
Intervention	213.67	21	4,009	-	-	4,009
Alternatives	-	-	-	-	24,024	24,024
Community-Based Process	88.62	104	9,216	-	-	9,216
Education	95.88	281	26,942	208	19,943	46,885
Information Dissemination	88.95	364	32,378	-	-	32,378
AOD Services Not Otherwise Classified	358.26	242	63,379	-	-	63,379
Subtotal		58,718	1,512,565	9,239	73,641	1,586,206
To support primary healthcare services	-	-	40,000			40,000
TOTAL		168,393	3,755,401	48,344	241,599	3,997,000

*Medicaid Ceiling Rate, Agency budgeted rate is:

\$340.83 for Psychiatric Diagnostic Interview
 \$27.08 for BH Counseling Therapy (Ind)
 \$221.05 for MH Crisis Intervention
 \$141.23 for Partial Hospitalization

\$21.65 for CPST (Ind)
 \$95.20 for AOD Case Management
 \$23.78 for AOD Individual Counseling
 \$193.79 for AOD Medical Somatic

\$107.87 for AOD Assessment

**INTEGRATED HEALTH SERVICES
TCN BEHAVIORAL HEALTH SERVICES
FISCAL YEAR 2012**

TCN Behavioral Health Services serves Greene County youth and adults with mental illness and alcohol/drug addiction. TCN proposes to use this additional allocation toward creating onsite access to physical healthcare for medically indigent clients. The funding will cover adults with alcohol/drug addiction and mental health issues, who often are not Medicaid-eligible. We anticipate improvement in recovery as critical health needs are addressed. TCN is contributing \$20,000 annually to the cost of these services.

IT IS THE RECOMMENDATION OF THE ALCOHOL/ DRUG AND MENTAL HEALTH COMMITTEES THAT THE MENTAL HEALTH & RECOVERY BOARD OF CLARK, GREENE AND MADISON COUNTIES ALLOCATE AN ADDITIONAL \$40,000 IN FY2012 TO TCN BEHAVIORAL HEALTH SERVICES, INC. FOR PHYSICAL HEALTH SERVICES FOR MEDICALLY INDIGENT GREENE COUNTY CLIENTS.

**EARLY CHILDHOOD MENTAL HEALTH CONSULTATION GRANT
ROCKING HORSE CENTER
FISCAL YEAR 2012**

Early Childhood Mental Health (ECMH) Consultation serves families with children ages 0-6 with emotional and behavioral problems, especially those at-risk for expulsion from preschool. Trained ECMH Consultants use a strength-based assessment to craft interventions with teachers and caregivers on behalf of young children to enhance their pro-social behavior.

Severe mental health problems (physical/verbal aggression, social isolation and withdrawal, inability to interact with others) frequently begin early in life. The earlier the onset and more significant the problems, the more lasting and dire the consequences are likely to become over the lifespan. Many such young children have been exposed to significant trauma (i.e. abuse, neglect), which left untreated, can translate to cumulative, lifelong struggles in school and work, physical and mental health problems, including addiction and obesity.

ECMH Consultation funding began in FY2006 and continued through FY2011 through an Ohio Department of Mental Health grant. The Ohio Department of Mental Health discontinued funding for this program. Therefore, the Mental Health & Recovery Board (MHRB) staff propose to continue funding through FY2012.

Rocking Horse Center has agreed to distribute ECMH funds for FY2012. The MHRB proposes subcontracting with Rocking Horse Center to serve residents of Clark and Madison Counties and the Council on Rural Services to serve Greene County residents. Consultation providers are required to submit program and fiscal reports in a timely manner and adhere to the grant award guidelines.

**IT IS THE RECOMMENDATION OF THE MENTAL HEALTH AND ALCOHOL/
OTHER DRUG COMMITTEES THAT THE MENTAL HEALTH & RECOVERY
BOARD OF CLARK, GREENE AND MADISON COUNTIES AUTHORIZE THE CEO
TO NEGOTIATE AND ENTER INTO CONTRACT WITH ROCKING HORSE
CENTER FOR CONTINUATION OF THE EARLY CHILDHOOD MENTAL HEALTH
CONSULTATION PROGRAM FOR THE PERIOD JULY 2011 THROUGH JUNE 2012
IN THE AMOUNT OF \$55,000, GRANT FUNDED AND COST RECONCILED.**

**REIMBURSEMENT TO TCN BEHAVIORAL HEALTH SERVICES
FOR THERMA PURE HEAT TREATMENT FOR RESIDENTIAL FACILITIES
FISCAL YEAR 2012**

TCN Behavioral Health Services has asked the MHRB to assist in the cost of treating two MHRB owned residential facilities for infestation of bed bugs. TCN and MHRB staff have researched various options and agree that these facilities should be treated with heat. Gold Seal is a company that provides a Therma Pure Heat treatment process. This clean, dry heat is introduced to the treatment area either through flexible Mylar ducts or infrared heaters in which the inside air is slowly raised to a safe sauna-like temperature. To ensure that the temperature of 140 degrees is maintained for a kill of targeted organisms, state of the art digital thermometers and needle thin temperature probes monitor ambient, surface, and core temperatures. This heating process penetrates cracks and crevices, mattresses, sofas, books, wall voids, etc. to kill bed bug larvae, adult and eggs. Since no toxic chemicals are used, and no harmful residues are present to contaminate the air or surfaces, the facility is safe to enter immediately after treatment.

These facilities have been treated at a cost of \$2,500 each. Gold Seal provides a 30-day warranty and has provided education to staff regarding intake procedures and inspections. Accordingly, it is recommended to reimburse TCN for 50% of the total cost.

IT IS THE RECOMMENDATION OF THE COMBINED ALCOHOL/DRUG AND MENTAL HEALTH COMMITTEES THAT THE MENTAL HEALTH & RECOVERY BOARD OF CLARK, GREENE AND MADISON COUNTIES (MHRB) REIMBURSE TCN BEHAVIORAL HEALTH SERVICES \$2,500, 50% OF THE TOTAL COST, FOR THE TREATMENT OF BED BUGS IN FY2012 FOR TWO RESIDENTIAL FACILITIES OWNED BY THE MHRB. TCN UNDERSTANDS THE AGENCY IS RESPONSIBLE FOR STRINGENT INTAKE PROCEDURES AND INSPECTIONS, SO THIS PROBLEM DOES NOT OCCUR ROUTINELY.



Treat Addiction. Save Lives.

News Release

FOR IMMEDIATE REVIEW

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ASAM RELEASES NEW DEFINITION OF ADDICTION

***Addiction Is a Chronic Brain Disease,
Not Just Bad Behaviors or Bad Choices***

CHEVY CHASE, MD, August 15, 2011 – The American Society of Addiction Medicine (ASAM) has released a new definition of addiction highlighting that addiction is a chronic brain disorder and not simply a behavioral problem involving too much alcohol, drugs, gambling or sex. This the first time ASAM has taken an official position that addiction is not solely related to problematic substance use.

When people see compulsive and damaging behaviors in friends or family members—or public figures such as celebrities or politicians—they often focus only on the substance use or behaviors as the problem. However, these outward behaviors are actually manifestations of an underlying disease that involves various areas of the brain, according to the new definition by ASAM, the nation’s largest professional society of physicians dedicated to treating and preventing addiction.

“At its core, addiction isn’t just a social problem or a moral problem or a criminal problem. It’s a brain problem whose behaviors manifest in all these other areas,” said Dr. Michael Miller, past president of ASAM who oversaw the development of the new definition. “Many behaviors driven by addiction are real problems and sometimes criminal acts. But the disease is about brains, not drugs. It’s about underlying neurology, not outward actions.”

The new definition resulted from an intensive, four-year process with more than 80 experts actively working on it, including top addiction authorities, addiction medicine clinicians and leading neuroscience researchers from across the country. The full governing board of ASAM and chapter presidents from many states took part, and there was extensive dialogue with research and policy colleagues in both the private and public sectors.

The new definition also describes addiction as a primary disease, meaning that it’s not the result of other causes such as emotional or psychiatric problems. Addiction is also recognized as a chronic

disease, like cardiovascular disease or diabetes, so it must be treated, managed and monitored over a life-time.

Two decades of advancements in neurosciences convinced ASAM that addiction needed to be redefined by what's going on in the brain. Research shows that the disease of addiction affects neurotransmission and interactions within reward circuitry of the brain, leading to addictive behaviors that supplant healthy behaviors, while memories of previous experiences with food, sex, alcohol and other drugs trigger craving and renewal of addictive behaviors. Meanwhile, brain circuitry that governs impulse control and judgment is also altered in this disease, resulting in the dysfunctional pursuit of rewards such as alcohol and other drugs. This area of the brain is still developing during teen-age years, which may be why early exposure to alcohol and drugs is related to greater likelihood of addiction later in life.

There is longstanding controversy over whether people with addiction have choice over anti-social and dangerous behaviors, said Dr. Raju Hajela, past president of the Canadian Society of Addiction Medicine and chair of the ASAM committee on the new definition. He stated that "the disease creates distortions in thinking, feelings and perceptions, which drive people to behave in ways that are not understandable to others around them. Simply put, addiction is not a choice. Addictive behaviors are a manifestation of the disease, not a cause."

"Choice still plays an important role in getting help. While the neurobiology of choice may not be fully understood, a person with addiction must make choices for a healthier life in order to enter treatment and recovery. Because there is no pill which alone can cure addiction, choosing recovery over unhealthy behaviors is necessary," Hajela said.

"Many chronic diseases require behavioral choices, such as people with heart disease choosing to eat healthier or begin exercising, in addition to medical or surgical interventions," said Dr. Miller. "So, we have to stop moralizing, blaming, controlling or smirking at the person with the disease of addiction, and start creating opportunities for individuals and families to get help and providing assistance in choosing proper treatment."

To read the full Definition of Addiction, visit:

<http://www.asam.org/DefinitionofAddiction-LongVersion.html>

Dr. Miller is past president of ASAM. Dr. Hajela is past president of the Canadian Society of Addiction Medicine and is a board member of ASAM. The American Society for Addiction Medicine is a professional society representing close to 3,000 physicians dedicated to increasing access and improving quality of addiction treatment, educating physicians and the public, supporting research and prevention, and promoting the appropriate role of physicians in the care of patients with addictions.

American Society of Addiction Medicine

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ASAM

American Society of Addiction Medicine

Public Policy Statement: Definition of Addiction

Short Definition of Addiction: 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.

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Addiction affects neurotransmission and interactions within reward structures of the brain, including the nucleus accumbens, anterior cingulate cortex, basal forebrain and amygdala, such that motivational hierarchies are altered and addictive behaviors, which may or may not include alcohol and other drug use, supplant healthy, self-care related behaviors. Addiction also affects neurotransmission and interactions between cortical and hippocampal circuits and brain reward structures, such that the memory of previous exposures to rewards (such as food, sex, alcohol and other drugs) leads to a biological and behavioral response to external cues, in turn triggering craving and/or engagement in addictive behaviors.

The neurobiology of addiction encompasses more than the neurochemistry of reward.¹ The frontal cortex of the brain and underlying white matter connections between the frontal cortex and circuits of reward, motivation and memory are fundamental in the manifestations of altered impulse control, altered judgment, and the dysfunctional pursuit of rewards (which is often experienced by the affected person as a desire to "be normal") seen in addiction--despite cumulative adverse consequences experienced from engagement in substance use and other addictive behaviors. The

frontal lobes are important in inhibiting impulsivity and in assisting individuals to appropriately delay gratification. When persons with addiction manifest problems in deferring gratification, there is a neurological locus of these problems in the frontal cortex. Frontal lobe morphology, connectivity and functioning are still in the process of maturation during adolescence and young adulthood, and early exposure to substance use is another significant factor in the development of addiction. Many neuroscientists believe that developmental morphology is the basis that makes early-life exposure to substances such an important factor.

Genetic factors account for about half of the likelihood that an individual will develop addiction. Environmental factors interact with the person's biology and affect the extent to which genetic factors exert their influence. Resiliencies the individual acquires (through parenting or later life experiences) can affect the extent to which genetic predispositions lead to the behavioral and other manifestations of addiction. Culture also plays a role in how addiction becomes actualized in persons with biological vulnerabilities to the development of addiction.

Other factors that can contribute to the appearance of addiction, leading to its characteristic bio-psycho-socio-spiritual manifestations, include:

- a. The presence of an underlying biological deficit in the function of reward circuits, such that drugs and behaviors which enhance reward function are preferred and sought as reinforcers;
- b. The repeated engagement in drug use or other addictive behaviors, causing neuroadaptation in motivational circuitry leading to impaired control over further drug use or engagement in addictive behaviors;
- c. Cognitive and affective distortions, which impair perceptions and compromise the ability to deal with feelings, resulting in significant self-deception;
- d. Disruption of healthy social supports and problems in interpersonal relationships which impact the development or impact of resiliencies;
- e. Exposure to trauma or stressors that overwhelm an individual's coping abilities;
- f. Distortion in meaning, purpose and values that guide attitudes, thinking and behavior;
- g. Distortions in a person's connection with self, with others and with the transcendent (referred to as God by many, the Higher Power by 12-steps groups, or higher consciousness by others); and
- h. The presence of co-occurring psychiatric disorders in persons who engage in substance use or other addictive behaviors.

Addiction is characterized by²:

- a. **Inability to consistently Abstain;**

- b. **Impairment in Behavioral control;**
- c. **Craving;** or increased “hunger” for drugs or rewarding experiences;
- d. **Diminished recognition of significant problems** with one’s behaviors and interpersonal relationships; and
- e. **A dysfunctional Emotional response.**

The **power of external cues** to trigger craving and drug use, as well as to increase the frequency of engagement in other potentially addictive behaviors, is also a characteristic of addiction, with the hippocampus being important in memory of previous euphoric or dysphoric experiences, and with the amygdala being important in having motivation concentrate on selecting behaviors associated with these past experiences.

Although some believe that the difference between those who have addiction, and those who do not, is the *quantity* or *frequency* of alcohol/drug use, engagement in addictive behaviors (such as gambling or spending)³, or exposure to other external rewards (such as food or sex), a characteristic aspect of addiction is the *qualitative way* in which the individual responds to such exposures, stressors and environmental cues. A particularly pathological aspect of *the way* that persons with addiction pursue substance use or external rewards is that preoccupation with, obsession with and/or pursuit of rewards (e.g., alcohol and other drug use) persist despite the accumulation of adverse consequences. These manifestations can occur compulsively or impulsively, as a reflection of impaired control.

Persistent risk and/or recurrence of relapse, after periods of abstinence, is another fundamental feature of addiction. This can be triggered by exposure to rewarding substances and behaviors, by exposure to environmental cues to use, and by exposure to emotional stressors that trigger heightened activity in brain stress circuits.⁴

In addiction there is a significant impairment in executive functioning, which manifests in problems with perception, learning, impulse control, compulsivity, and judgment. People with addiction often manifest a lower readiness to change their dysfunctional behaviors despite mounting concerns expressed by significant others in their lives; and display an apparent lack of appreciation of the magnitude of cumulative problems and complications. The still developing frontal lobes of adolescents may both compound these deficits in executive functioning and predispose youngsters to engage in “high risk” behaviors, including engaging in alcohol or other drug use. The profound drive or craving to use substances or engage in apparently rewarding behaviors, which is seen in many patients with addiction, underscores the compulsive or avolitional aspect of this disease. This is the connection with “powerlessness” over addiction and “unmanageability” of life, as is described in Step 1 of 12 Steps programs.

Addiction is more than a behavioral disorder. Features of addiction include aspects of a person’s behaviors, cognitions, emotions, and interactions with others, including a person’s ability to relate to members of their family, to members of their community, to their own psychological state, and to things that transcend their daily experience.

Behavioral manifestations and complications of addiction, primarily due to impaired control, can include:

- a. Excessive use and/or engagement in addictive behaviors, at higher frequencies and/or quantities than the person intended, often associated with a persistent desire for and unsuccessful attempts at behavioral control;
- b. Excessive time lost in substance use or recovering from the effects of substance use and/or engagement in addictive behaviors, with significant adverse impact on social and occupational functioning (e.g. the development of interpersonal relationship problems or the neglect of responsibilities at home, school or work);
- c. Continued use and/or engagement in addictive behaviors, despite the presence of persistent or recurrent physical or psychological problems which may have been caused or exacerbated by substance use and/or related addictive behaviors;
- d. A narrowing of the behavioral repertoire focusing on rewards that are part of addiction; and
- e. An apparent lack of ability and/or readiness to take consistent, ameliorative action despite recognition of problems.

Cognitive changes in addiction can include:

- a. Preoccupation with substance use;
- b. Altered evaluations of the relative benefits and detriments associated with drugs or rewarding behaviors; and
- c. The inaccurate belief that problems experienced in one's life are attributable to other causes rather than being a predictable consequence of addiction.

Emotional changes in addiction can include:

- a. Increased anxiety, dysphoria and emotional pain;
- b. Increased sensitivity to stressors associated with the recruitment of brain stress systems, such that "things seem more stressful" as a result; and
- c. Difficulty in identifying feelings, distinguishing between feelings and the bodily sensations of emotional arousal, and describing feelings to other people (sometimes referred to as alexithymia).

The emotional aspects of addiction are quite complex. Some persons use alcohol or other drugs or pathologically pursue other rewards because they are seeking "positive reinforcement" or the creation of a positive emotional state ("euphoria"). Others pursue substance use or other rewards because they have experienced relief from negative emotional states ("dysphoria"), which constitutes "negative reinforcement." Beyond the initial experiences of reward and relief, there is a **dysfunctional emotional state**

present in most cases of addiction that is associated with the persistence of engagement with addictive behaviors. The state of addiction is not the same as the state of intoxication. When anyone experiences mild intoxication through the use of alcohol or other drugs, or when one engages non-pathologically in potentially addictive behaviors such as gambling or eating, one may experience a “high”, felt as a “positive” emotional state associated with increased dopamine and opioid peptide activity in reward circuits. After such an experience, there is a neurochemical rebound, in which the reward function does not simply revert to baseline, but often drops below the original levels. This is usually not consciously perceptible by the individual and is not necessarily associated with functional impairments.

Over time, repeated experiences with substance use or addictive behaviors are not associated with ever increasing reward circuit activity and are not as subjectively rewarding. Once a person experiences withdrawal from drug use or comparable behaviors, there is an anxious, agitated, dysphoric and labile emotional experience, related to suboptimal reward and the recruitment of brain and hormonal stress systems, which is associated with withdrawal from virtually all pharmacological classes of addictive drugs. While tolerance develops to the “high,” tolerance does not develop to the emotional “low” associated with the cycle of intoxication and withdrawal. Thus, in addiction, persons repeatedly attempt to create a “high”--but what they mostly experience is a deeper and deeper “low.” While anyone may “want” to get “high”, those with addiction feel a “need” to use the addictive substance or engage in the addictive behavior in order to try to resolve their dysphoric emotional state or their physiological symptoms of withdrawal. Persons with addiction compulsively use even though it may not make them feel good, in some cases long after the pursuit of “rewards” is not actually pleasurable.⁵ Although people from any culture may choose to “get high” from one or another activity, it is important to appreciate that addiction is not solely a function of choice. Simply put, addiction is not a desired condition.

As addiction is a chronic disease, periods of relapse, which may interrupt spans of remission, are a common feature of addiction. It is also important to recognize that return to drug use or pathological pursuit of rewards is not inevitable.

Clinical interventions can be quite effective in altering the course of addiction. Close monitoring of the behaviors of the individual and contingency management, sometimes including behavioral consequences for relapse behaviors, can contribute to positive clinical outcomes. Engagement in health promotion activities which promote personal responsibility and accountability, connection with others, and personal growth also contribute to recovery. It is important to recognize that **addiction can cause disability or premature death, especially when left untreated or treated inadequately.**

The qualitative ways in which the brain and behavior respond to drug exposure and engagement in addictive behaviors are different at later stages of addiction than in earlier stages, indicating progression, which may not be overtly apparent. As is the case with other chronic diseases, the condition must be monitored and managed over time to:

- a. Decrease the frequency and intensity of relapses;

- b. Sustain periods of remission; and
- c. Optimize the person's level of functioning during periods of remission.

In some cases of addiction, medication management can improve treatment outcomes. In most cases of addiction, the integration of psychosocial rehabilitation and ongoing care with evidence-based pharmacological therapy provides the best results. Chronic disease management is important for minimization of episodes of relapse and their impact. Treatment of addiction saves lives †

Addiction professionals and persons in recovery know the hope that is found in recovery. Recovery is available even to persons who may not at first be able to perceive this hope, especially when the focus is on linking the health consequences to the disease of addiction. **As in other health conditions, self-management, with mutual support, is very important in recovery from addiction.** Peer support such as that found in various "self-help" activities is beneficial in optimizing health status and functional outcomes in recovery. ‡

Recovery from addiction is best achieved through a combination of self-management, mutual support, and professional care provided by trained and certified professionals.

† See ASAM Public Policy Statement on **Treatment for Alcohol and Other Drug Addiction**, Adopted: May 01, 1980, Revised: January 01, 2010

(<http://www.asam.org/1TREATMENT%20AND%20AOD%201-10.pdf>)

‡ see ASAM Public Policy Statement on **The Relationship between Treatment and Self Help: A Joint Statement of the American Society of Addiction Medicine, the American Academy of Addiction Psychiatry, and the American Psychiatric Association**, Adopted: December 01, 1997

(<http://www.asam.org/1TREATMENT%20AND%20SELF-HELP%20-%20JOINT%2012-972.pdf>)

Explanatory footnotes:

1. The neurobiology of reward has been well understood for decades, whereas the neurobiology of addiction is still being explored. Most clinicians have learned of reward pathways including projections from the ventral tegmental area (VTA) of the brain, through the median forebrain bundle (MFB), and terminating in the nucleus accumbens (Nuc Acc), in which dopamine neurons are prominent. Current neuroscience recognizes that the neurocircuitry of reward also involves a rich bi-directional circuitry connecting the nucleus accumbens and the basal forebrain. It is the reward circuitry where reward is registered, and where the most fundamental rewards such as food,

hydration, sex, and nurturing exert a strong and life-sustaining influence. Alcohol, nicotine, other drugs and pathological gambling behaviors exert their initial effects by acting on the same reward circuitry that appears in the brain to make food and sex, for example, profoundly reinforcing. Other effects, such as intoxication and emotional euphoria from rewards, derive from activation of the reward circuitry. While intoxication and withdrawal are well understood through the study of reward circuitry, understanding of addiction requires understanding of a broader network of neural connections involving forebrain as well as midbrain structures. Selection of certain rewards, preoccupation with certain rewards, response to triggers to pursue certain rewards, and motivational drives to use alcohol and other drugs and/or pathologically seek other rewards, involve multiple brain regions outside of reward neurocircuitry itself.

2. These five features are not intended to be used as “diagnostic criteria” for determining if addiction is present or not. Although these characteristic features are widely present in most cases of addiction, regardless of the pharmacology of the substance use seen in addiction or the reward that is pathologically pursued, each feature may not be equally prominent in every case. The diagnosis of addiction requires a comprehensive biological, psychological, social and spiritual assessment by a trained and certified professional.

3. In this document, the term "addictive behaviors" refers to behaviors that are commonly rewarding and are a feature in many cases of addiction. Exposure to these behaviors, just as occurs with exposure to rewarding drugs, is facilitative of the addiction process rather than causative of addiction. The state of brain anatomy and physiology is the underlying variable that is more directly causative of addiction. Thus, in this document, the term “addictive behaviors” does not refer to dysfunctional or socially disapproved behaviors, which can appear in many cases of addiction. Behaviors, such as dishonesty, violation of one’s values or the values of others, criminal acts etc., can be a component of addiction; these are best viewed as complications that result from rather than contribute to addiction.

4. The anatomy (the brain circuitry involved) and the physiology (the neuro-transmitters involved) in these three modes of relapse (drug- or reward-triggered relapse vs. cue-triggered relapse vs. stress-triggered relapse) have been delineated through neuroscience research.

Relapse triggered by exposure to addictive/rewarding drugs, including alcohol, involves the nucleus accumbens and the VTA-MFB-Nuc Acc neural axis (the brain's mesolimbic dopaminergic "incentive salience circuitry"--see footnote 2 above). Reward-triggered relapse also is mediated by glutamatergic circuits projecting to the nucleus accumbens from the frontal cortex.

Relapse triggered by exposure to conditioned cues from the environment involves glutamate circuits, originating in frontal cortex, insula, hippocampus and amygdala projecting to mesolimbic incentive salience circuitry.

Relapse triggered by exposure to stressful experiences involves brain stress circuits beyond the hypothalamic-pituitary-adrenal axis that is well known as the core of

the endocrine stress system. There are two of these relapse-triggering brain stress circuits – one originates in noradrenergic nucleus A2 in the lateral tegmental area of the brain stem and projects to the hypothalamus, nucleus accumbens, frontal cortex, and bed nucleus of the stria terminalis, and uses norepinephrine as its neurotransmitter; the other originates in the central nucleus of the amygdala, projects to the bed nucleus of the stria terminalis and uses corticotrophin-releasing factor (CRF) as its neurotransmitter.

5. Pathologically pursuing reward (mentioned in the Short Version of this definition) thus has multiple components. It is not necessarily the amount of exposure to the reward (e.g., the dosage of a drug) or the frequency or duration of the exposure that is pathological. In addiction, pursuit of rewards persists, despite life problems that accumulate due to addictive behaviors, even when engagement in the behaviors ceases to be pleasurable. Similarly, in earlier stages of addiction, or even before the outward manifestations of addiction have become apparent, substance use or engagement in addictive behaviors can be an attempt to pursue relief from dysphoria; while in later stages of the disease, engagement in addictive behaviors can persist even though the behavior no longer provides relief.

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