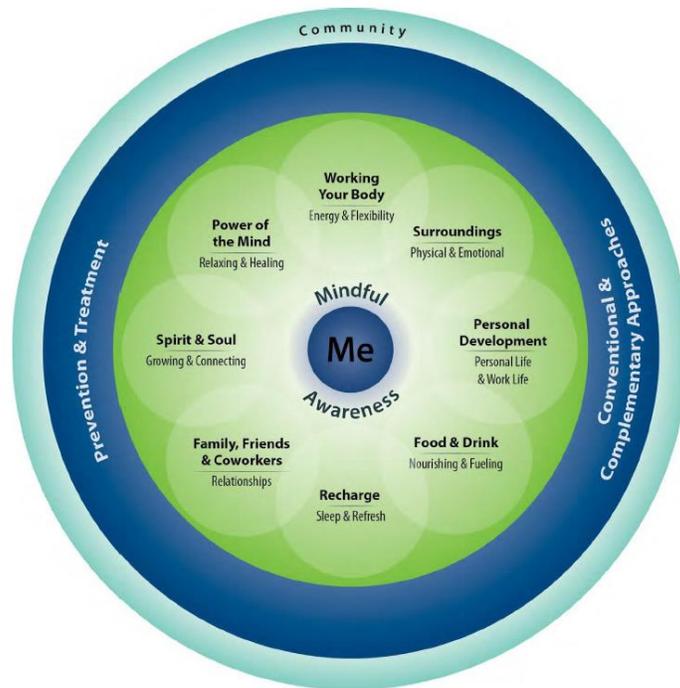


WHOLE HEALTH: CHANGE THE CONVERSATION

Advancing Skills in the Delivery of
Personalized, Proactive, Patient-Driven Care

Substance Use Disorders Clinical Tool



This document has been written for clinicians. The content was developed by the Integrative Medicine Program, Department of Family Medicine, University of Wisconsin-Madison School of Medicine and Public Health in cooperation with Pacific Institute for Research and Evaluation, under contract to the Office of Patient Centered Care and Cultural Transformation, Veterans Health Administration.

Information is organized according to the diagram above, the *Components of Proactive Health and Well-Being*. While conventional treatments may be covered to some degree, the focus is on other areas of Whole Health that are less likely to be covered elsewhere and may be less familiar to most readers. There is no intention to dismiss what conventional care has to offer. Rather, you are encouraged to learn more about other approaches and how they may be used to complement conventional care. The ultimate decision to use a given approach should be based on many factors, including patient preferences, clinician comfort level, efficacy data, safety, and accessibility. No one approach is right for everyone; personalizing care is of fundamental importance.

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Introduction

Substance use disorders (SUDs) are among the most common and costly medical problems in Veterans and active duty military personnel.¹ In 2011, over 70% of patients in specialty care programs were tobacco-dependent.² Combat exposure is a risk factor for SUDs, including tobacco use, just as it is for other mental health problems, including post-traumatic stress disorder (PTSD) and major depression.³ SUDs and mental health conditions frequently co-occur as a “dual diagnosis.” Approximately one-third to a half of patients seeking treatment for SUDs also meet criteria for PTSD, with some studies reporting even higher prevalence of PTSD among those with SUDs.⁴ Individuals often use substances to self-medicate symptoms of physical or mental health conditions, or stress.

Screening and Brief Intervention (SBI)

It is essential to identify not only people who have SUDs but also those who are at risk for developing SUDs. Routine screening of adults for tobacco use⁵ and unhealthy alcohol use,⁶ followed by brief behavioral counseling (often based on motivational interviewing principles) when needed, have been shown to reduce tobacco use and drinking, respectively, and related harms in primary care and mental health settings. For alcohol, evidence for efficacy is strongest for brief (10-15 minutes) multicontact interventions for nondependent drinkers.⁷ Although evidence on the efficacy of drug SBI⁸ is still limited and inconclusive, due to the scope of drug use-related problems (especially prescription-based drugs) and the successes of tobacco and alcohol SBI services, many professional organizations recommend implementation of routine drug SBI for adults in primary care.^{9,10}

Barriers to Seeking Help

Barriers to seeking help may include stigma and negative beliefs about mental health and addiction-related care, general discomfort with “asking for help,” a “zero tolerance” approach to drug misuse in active duty members, and confidentiality concerns, including the sharing of protected medical records between the VA and the Department of Defense (DoD).¹

Treatment Considerations

- Address all areas of life that have been affected by substance use, providing the patient with appropriate tools supporting recovery in these areas.
- Assess for and treat mental and physical health conditions co-occurring with SUDs; concurrent treatment of co-occurring mental health problems (e.g., anxiety) and SUDs (“dual diagnosis”) is critical for the success of recovery.¹¹

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- Address potential barriers to healthy recovery, especially those that may increase relapse risk and affect treatment engagement.¹
- Determine the appropriate level of care to best support the patient’s recovery (see Table 1).
- Collaborate with the patient in the development of recovery goals,¹ and tailor the treatment plan to the patient’s individual needs and preferences.
- Closely monitor treatment progress, especially in early recovery when relapse risk is highest.¹

Table 1. Levels of Care/Treatment Modalities	
Residential treatment	Patients reside at the treatment facility for weeks to months and receive intensive behavioral treatment daily, in group and individual therapy settings
Intensive outpatient/day treatment	Patients attend group and/or individual therapy sessions several hours per day, several days per week in the outpatient settings
Outpatient treatment	Patients attend group and/or individual therapy sessions weekly or less frequently, based on individual treatment needs
Detoxification	Patients receive medical monitoring, treatment, and support during detoxification

Recovery from addiction and maintenance of recovery is an ongoing process that should be integrated into the patients’ daily life. Early-recovery programs (detoxification, residential, day, or outpatient treatments) are often intensive; they can help patients lay a foundation for successful recovery but are not “terminal” treatment programs by themselves. After early-recovery treatment is completed, it is best for the patient to get engaged in *aftercare (continued care)* outpatient programs for continued support while building on treatment gains and progressing in recovery.

Detoxification

Detoxification is often the first step in SUD treatment. This process can be psychological or both physical and psychological. Tobacco, alcohol, benzodiazepines, and opioids are common substances that cause physical dependence, with a resulting withdrawal. Alcohol and benzodiazepine withdrawal syndrome can be life threatening if untreated; it is critical to assess the patient’s current medical situation as well as past medical history for conditions that increase the dangers of symptomatic withdrawal. Patients with current symptoms or past history of withdrawal, especially advanced withdrawal (hallucinations, seizures, or delirium tremens), should be medically monitored and treated with appropriate pharmacological means to decrease the symptomatology and danger of complications. Benzodiazepines are the first-line treatment for alcohol withdrawal. Opioid withdrawal is not life-threatening from a medical perspective; however, it can produce severe symptoms that are difficult for the patients to manage and endure, often leading

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back to substance use. Clonidine, buprenorphine, or methadone can alleviate symptoms of and be used in the treatment of opioid withdrawal.

Pharmacotherapy

Pharmacotherapy can aid recovery from substance dependence and enhance outcomes in some SUDs (see Table 2), especially opioid dependence and tobacco dependence.¹²

Table 2. Commonly Prescribed “Maintenance” Pharmacotherapy		
<i>Substance</i>	<i>Maintenance/ Relapse Prevention</i>	<i>Notes</i>
Alcohol	Naltrexone	Naltrexone should not be used in patients requiring opioid therapy for pain. Extended-release injectable naltrexone can result in better outcomes compared to the daily oral preparations.
	Acamprosate	Acamprosate can additionally have antianxiety effects.
	Disulfiram	Disulfiram is often reserved for more refractory cases and recommended to be taken in a witnessed fashion.
Opioids	Methadone	Methadone can be administered through licensed programs only.
	Buprenorphine	Buprenorphine can be prescribed as an office-based therapy by physicians trained in buprenorphine prescribing.
	Naltrexone	Naltrexone should not be used in patients requiring opioid therapy for pain. Extended-release injectable naltrexone can result in better outcomes compared to the daily oral preparations.
Tobacco	Nicotine replacement therapy	Nicotine replacement therapy is often recommended as scheduled daily doses (transdermal patch) plus as-needed doses (e.g., gums, lozenges, or inhalers) for “break-through” nicotine craving.
	Varenicline	Varenicline may alter mood and increase the risk of depression and suicidal ideation; when using this medication, screening and monitoring for depression is recommended.
	Bupropion	Bupropion, as an atypical antidepressant, is also used as a therapy for depression.

OPIOID OVERDOSE WARNING

Those who abstained from opioids, even for a relatively short period of time, are at increased risk for accidental overdose. It is critical to educate patients about the danger of unintentional overdose after a period of “staying clean.” With abstinence (or even reduced use), the individual’s tolerance level for the drug decreases; resorting to using prior (e.g., prerule) doses of opioids can cause overdose and death. Injectable-naloxone kits may help prevent a fatal opioid overdose in active users.

Opioid Overdose Prevention Toolkit:

<http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA13-4742>

Whole Health Approach to the Treatment of SUDs

High-quality holistic, integrated care should provide services for SUDs as well as the other areas of life that can be affected by SUDs: mental health; physical health; nutrition and exercise; rest and self-care; coping and communication skills; self-awareness; connection with others and self; growth and goal-setting; employment and housing; and general recovery and reengagement in life without the use of substances.

Surroundings (physical and emotional environment)

- Risk factors for relapse (“triggers”) are often unique and specific to the individual.
- Physical and emotional surroundings (“external triggers”) can trigger cravings or urges to use a substance during recovery, and precipitate relapse.
- Negative emotional states (“internal triggers”) are known risk factors for relapse.
- Some *common* risk factors for relapse have become known under the acronym of “HALT” (Hungry, Angry, Lonely, Tired).
- Bringing awareness to one’s physical and emotional surroundings, identifying and then reducing or eliminating external and internal personal risk factors for relapse are critical aspects of relapse prevention and recovery.

Food and Drink (nutrition and fuel)

- In SUDs, nutrition and related health often suffer.
- Individuals with SUDs should strive to avoid any addictive substances, as their use can lead to a pattern of misuse and compromise recovery.
- A healthy diet positively influences health in general, and may ease the detoxification process, facilitate recovery, and impact craving.¹³
- Excessive consumption of alcohol affects carbohydrate, lipid, and protein metabolism, and absorption of vital nutrients;¹³ it is a common medical practice to recommend a daily multivitamin and thiamine supplementation for alcohol-dependent individuals.

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Recharge (rest and sleep)

- Poor sleep, tension (stress), and negative affective states increase the risk of relapse in SUDs.¹⁴
- Adequate sleep, rest, and relaxation are essential components of self-care, optimal functioning, healing, and recommitting to a healthy lifestyle in recovery.
- Although adults typically need between 7 and 9 hours of good-quality sleep per night, optimal sleep patterns and requirements are person-specific.¹⁵

Working Your Body (energy and flexibility)

- Physical exercise can benefit physical fitness and cardiovascular health, improve psychological health and energy, and help reduce symptoms of tension or stress, anxiety, depression, and sleep problems—all known relapse risk factors.¹⁶
- Exercise can exert positive effects on the brain's reward systems, which are often affected by substance use.¹⁶
- The American College of Sports Medicine provides guidelines on pre-participation screening when assessing the patient's risk and providing clearance for engaging in an exercise program.¹⁷

Personal Development (personal life and work life)

- Personal and work-related activities can affect one's sense of well-being.
- It is important, especially in recovery, to ensure that one has an adequate "supply" of positive, nourishing activities, and minimizes the impact of draining or negative activities in daily life.
- Goal setting, exploring personal values, connecting with others and self, taking responsibility for one's actions, achieving life balance, and addressing the underlying issues that have been related to substance use are all areas that can promote personal development.

Family, Friends, and Coworkers (listening and being heard)

- Spending time with those who are using substances is a known risk factor for personal substance use and should be limited or avoided, especially early in recovery.
- Patients should be encouraged to consider opportunities to find and/or create a personal substance-free support network, as healthy social support is important for the success of recovery from SUDs.
- Support can come from mutual self-help group involvement, religious communities, community groups, and friends and family.
- Educating family and other key individuals about SUDs and recovery can further aid recovery.

Spirit and Soul (growing and connecting)

- Perceived connection to others can help decrease the sense of isolation that can contribute to relapse.
- Spirituality can be defined broadly and may not necessarily include any religion.

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- Spiritual or religious involvement can be a protective factor against SUDs and relapse.^{18,19}
- Spiritual self-schema (3-S), a spiritually anchored intervention, may help decrease impulsivity, drug use, and other HIV risk behaviors.^{20,21}

Power of the Mind (relaxing and healing)

- **Mindfulness meditation**
 - Mindfulness-based interventions have shown some efficacy for physical and mental health conditions,²² including depression, anxiety, pain, and stress coping.²³
 - Cultivating skills in mindful, nonreactive awareness to relapse triggers (thoughts, feelings, sensations, environmental factors) is an important part of relapse preventions and self-management in recovery.
 - Mindfulness-based approaches, especially when used as an adjunct to standard-of-care treatments, can help improve outcomes in SUDs.²³⁻²⁵
 - Mindfulness-based stress reduction (MBSR) is the most common mindfulness program used in medical settings. Mindfulness-based relapse prevention (MBRP), although patterned after the MBSR, was developed specifically for relapse prevention in SUDs. Both programs have shown some efficacy for relapse prevention in SUDs. Other programs evaluated in research settings include Vipassana meditation, spiritual self-schema (3-S), acceptance and commitment therapy (ACT), and dialectical behavior therapy (DBT).
- **Transcendental meditation**
 - Transcendental meditation has shown potential benefits in SUDs that may include decreased drug, alcohol, and tobacco use;²⁶ however, research evidence is limited and inconsistent.²⁷

Substance Use Treatment Interventions

Evidence-based psychological treatments (EBPT) are a recommended, first-line approach to the treatment of SUDs. They can be delivered in a variety of formats (individual, group, or couples therapy) and settings (residential, day treatment, outpatient), and they can vary in duration, frequency, and intensity. Effective EBPTs have been shown to enhance patient motivation to stop or reduce substance use, improve self-efficacy, promote a therapeutic alliance, strengthen coping skills, reinforce contingencies crucial for recovery, and strengthen social support for recovery.²⁸ There is no evidence that one type of intervention is superior to others^{29,30} However, motivational interviewing and cognitive behavioral therapy-based interventions may be particularly well suited for patients with SUDs and co-occurring mental health conditions (“dual diagnosis”), such as depression or anxiety.³¹ Adding contingency management to a treatment plan may help reduce treatment dropout rate.³² Marital and family therapy can help families cope with the challenges of living with a SUD-affected person, and motivate the patient to enter treatment.³³ In addition, screening and brief interventions are evidence-based brief services, shown to be effective for harm reduction in SUDs, particularly tobacco and unhealthy alcohol use, and feasible for implementation in primary care (see the Screening and Brief Intervention section at the beginning of this handout for more information).

Table 3. Evidence-based psychological treatments showing benefit for SUDs^{28,31-33}

- Behavioral activation
- Behavioral couples therapy (BCT)
- Cognitive behavioral coping skills training
- Cognitive behavioral therapy (CBT)
- Community reinforcement and family training (CRAFT)
- Contingency management/motivational incentives
- Motivational enhancement therapy (MET)
- Motivational interviewing (MI)
- Relapse prevention
- Twelve-step facilitation

Community-Based Recovery Programs

Community-based programs (or mutual self-help groups) include 12-step programs (such as Alcoholics Anonymous [AA], Narcotics Anonymous [NA], and other related programs). These programs are free, anonymous, and easily accessible. Many of these programs, especially those based on the 12-step model, have a general spiritual foundation (not necessarily religious), and do not require any specific spiritual or religious background for participation. SMART Recovery (Self-Management And Recovery Training), a science-informed approach, can provide an alternative to 12-step self-help groups. Research evidence provides support for the efficacy of mutual self-help 12-step programs for relapse prevention (see Table 4).

In addition to 12-step programs for individuals with SUDs, similar, parallel programs are available for their families and friends; for example, Al-Anon or Alateen can become a source of support and valuable resource for adult and younger individuals with SUDs, respectively.³³

Table 4. Research Supporting 12-Step Groups

- Community-based recovery programs (mutual self-help groups) have been shown to lead to improvements in SUD outcomes for individuals who are engaged in the programs;³⁴⁻³⁶ active participation in these groups increases the likelihood of a successful, long-term recovery.^{37,38}
- Both meeting attendance and involvement in prescribed 12-step activities, especially in the earlier stages of recovery, have been related to improved outcomes and abstinence in SUDs.³⁹
- Compared to receiving support from non-AA members, support from AA members has been shown to be beneficial for maintaining abstinence.^{38,40}
- AA meeting attendance and having a sponsor (an AA member functioning as a mentor for AA-based recovery) were identified as the strongest predictors of abstinence over time.⁴¹

Complementary and Alternative Medicine Therapies

Among the complementary and alternative medicine (CAM) interventions, meditation interventions have received the most scientific attention, with evidence supporting the efficacy of mindfulness meditation-based interventions for relapse prevention in SUDs, as outlined above (“Power of the Mind”). Several other CAM modalities may provide potential benefits as adjunct treatments for SUDs. Limited or very limited research evidence exists for the efficacy of acupuncture, massage, yoga, energy therapies (e.g., qi gong, Reiki, therapeutic touch), hypnotherapy, and music therapy in SUDs.⁴²⁻⁴⁹

Of note, these CAM therapies are considered generally safe, and in addition to their potential positive effects on SUDs, they may help improve self-care, which is a vital component of successful SUD recovery. Very limited research has evaluated the effects of transcranial magnetic stimulation (TMS) and of electroencephalogram (EEG) biofeedback; these specialized modalities may also be beneficial in SUDs.^{50,51}

Note: Please see the module on **Dietary Supplements** for more information about how to determine whether or not a specific supplement is appropriate for a given individual. Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

Biologically based therapies include the use of herbs, special macronutrient diets, megadoses of vitamins or minerals, and other nutritional supplements. Administration of vitamin B1 (thiamine) in alcohol withdrawal and prescribing it long-term in alcohol-dependent patients is safe and a part of “standard of care” for alcohol dependence.^{12,43}

Overall, there is only very limited research, often of poor methodological quality, evaluating the effects of other biological therapies. Of note, while many of these therapies appear safe and may be helpful (e.g., St. John’s wort, milk thistle, or kudzu root), some may exert serious, even life-threatening, adverse effects or have a potential for abuse (Kratom,

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Ibogaine, Heantos, some of the Chinese herbal remedies);⁵² clinicians should exercise caution before endorsing any non-well-studied biologically based therapies to their patients.

Resources for More Information

Patient Resources	
Alcohol	Rethinking Drinking: Alcohol and your health: http://rethinkingdrinking.niaaa.nih.gov/default.asp Veteran Drinker’s Check-up: http://www.veterandrunkerscheckup.org/
Community-based recovery resources	Alcoholics Anonymous: http://www.alcoholics-anonymous.org Narcotics Anonymous: http://www.na.org/ SMART Recovery: http://www.smartrecovery.org/
Support for Veterans	Make the Connection—to share with Veterans for mutual support in recovery: http://maketheconnection.net/stories-of-connection?symptoms=23 https://www.facebook.com/VeteransMTC https://www.youtube.com/user/VeteransMTC
Treatment resources	Treatment Resources Locator (SAMHSA): http://www.samhsa.gov/treatment/index.aspx
Wellness resources	After Deployment: Wellness Resources for the Military Community: http://afterdeployment.t2.health.mil/

Provider Resources	
Alcohol and drug use–related resources	
Guides/ resources	<ul style="list-style-type: none"> • Mental Health Services Substance Use Disorder Resources for Providers SharePoint Site: https://vaww.portal.va.gov/sites/OMHS/SUD/default.aspx • National Institute on Alcohol Abuse and Alcoholism (NIAAA). Helping Patients Who Drink Too Much: A Clinician’s Guide. Updated 2005 Edition: http://www.niaaa.nih.gov/guide • National Institute on Alcohol Abuse and Alcoholism (NIAAA). Alcohol Screening and Brief Intervention for Youth: A Practitioner’s Guide. 2011: http://www.niaaa.nih.gov/YouthGuide • National Institute on Drug Abuse (NIDA). Resource Guide: Screening for Drug Use in General Medical Settings. Revised: March 2012: www.drugabuse.gov/publications/resource-guide • National Institute on Drug Abuse (NIDA). Other Resources: http://www.drugabuse.gov/about-nida/other-resources • U.S. Preventive Services Task Force. Screening and Behavioral Interventions in Primary Care to Reduce Alcohol Misuse, 2014: http://www.uspreventiveservicestaskforce.org/uspstf/uspdrin.htm • U.S. Preventive Services Task Force. Screening for Illicit Drug Use, 2008: http://www.uspreventiveservicestaskforce.org/uspstf/uspdrug.htm

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Education/ training	<ul style="list-style-type: none"> • Brief Motivational Interviewing Training: http://vaww.chce.research.va.gov/apps/aft/Login.asp http://vaww.chce.research.va.gov/apps/bmiforsuv/default.htm • Buprenorphine training program: http://www.buppractice.com • MIRECC Educational Products for Substance Use Disorders: http://www.mirecc.va.gov/apps/activities/products/keywordProductList.asp?id=20 • Prevention of Alcohol Withdrawal Syndrome 15-minute online course: http://www.chce.research.va.gov/apps/PAWS/
Substance use information and organizations	<ul style="list-style-type: none"> • American Society of Addiction Medicine: http://www.asam.org/ • Association for Addiction Professionals: http://www.naadac.org/ • Center of Alcohol Studies: http://alcoholstudies.rutgers.edu/ • National Center on Addiction and Substance Abuse: http://www.casacolumbia.org/ • National Clearinghouse for Alcohol and Drug Information: http://store.samhsa.gov/home • National Council on Alcoholism and Drug Dependence: http://www.ncadd.org/ • National Institute on Alcohol Abuse and Alcoholism (NIAAA): http://www.niaaa.nih.gov/ • National Institute on Drug Abuse (NIDA): http://www.drugabuse.gov/ • Substance Abuse and Mental Health Services Administration: http://www.samhsa.gov/
Toolkits	<ul style="list-style-type: none"> • Community Provider Toolkit: http://www.mentalhealth.va.gov/communityproviders/clinic_sud.asp • NIDA Clinical Toolbox: http://www.nidatoolbox.org/ • Opioid Overdose Prevention Toolkit: http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA13-4742 • SUD Quality Enhancement Research Initiative (QUERI) Self-Help Toolkit: http://vaww.chce.research.va.gov/selfhelp/index.html
Treatment resources	<ul style="list-style-type: none"> • Treatment Resources Locator (SAMHSA): http://www.samhsa.gov/treatment/index.aspx
VA-DoD guidelines	<ul style="list-style-type: none"> • VA-DoD Clinical Practice Guidelines for the Management of Substance Use Disorders (2009): http://www.healthquality.va.gov/guidelines/MH/sud/
Smoking cessation–related resources	
<ul style="list-style-type: none"> • Department of Veterans Affairs Tobacco Dependence Website: https://vaww.portal.va.gov/sites/tobacco/Tobacco%20Cessation%20Clinical%20Updates%202009/Forms/AllItems.aspx • U.S. Department of Health and Human Services Public Health Service. Helping Smokers Quit: A Guide for Clinicians. Revised May 2008: http://www.ahrq.gov/legacy/clinic/tobacco/clinhlpsmksqt.htm • U.S. Preventive Services Task Force. Counseling and interventions to prevent tobacco use and tobacco-caused disease in adults and pregnant women, 2009: http://www.uspreventiveservicestaskforce.org/uspstf/uspstbac2.htm 	

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General resources

- Centers for Disease Control and Prevention: <http://www.cdc.gov/>
- *Recommendations*. U.S. Preventive Services Taskforce: www.uspreventiveservicestaskforce.org/recommendations.htm

Whole Health: Change the Conversation Website

Interested in learning more about Whole Health?
Browse our website for information on personal and professional care.

<http://projects.hsl.wisc.edu/SERVICE/index.php>

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References

1. Hawkins EJ, Grossbard J, Benbow J, Nacev V, Kivlahan DR. Evidence-based screening, diagnosis, and treatment of substance use disorders among veterans and military service personnel. *Mil Med.* Aug 2012;177(8 Suppl):29-38.
2. VA Palo Alto Health Care System. Substance use disorder QUERI strategic plan. 2011; http://www.queri.research.va.gov/about/strategic_plans/sud.pdf. Accessed February 21, 2014.
3. Sirratt D, Ozanian A, Traenkner B. Epidemiology and prevention of substance use disorders in the military. *Mil Med.* Aug 2012;177(8 Suppl):21-28.
4. Brady KT, Back SE, Coffey SF. Substance abuse and posttraumatic stress disorder. *Curr Dir Psychol Sci.* 2004;13(5):206-209.
5. US Preventive Services Task Force. Counseling and interventions to prevent tobacco use and tobacco-caused disease in adults and pregnant women. 2009; <http://www.uspreventiveservicestaskforce.org/uspstf/uspstbac2.htm>. Accessed February 21, 2014.
6. US Preventive Services Task Force. Screening and behavioral interventions in primary care to reduce alcohol misuse. 2014; <http://www.uspreventiveservicestaskforce.org/uspstf/uspdrin.htm>. Accessed February 21, 2014.
7. Jonas DE, Garbutt JC, Amick HR, et al. Behavioral counseling after screening for alcohol misuse in primary care: a systematic review and meta-analysis for the U.S. Preventive Services Task Force. *Ann Intern Med.* Nov 6 2012;157(9):645-654. DOI: 10.7326/0003-4819-157-9-201211060-00544.
8. US Preventive Services Task Force. Screening for Illicit Drug Use, 2008. <http://www.uspreventiveservicestaskforce.org/uspstf/uspdrug.htm>. Accessed February 21, 2014.

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9. National Institute on Drug Abuse. Screening for drug use in general medical settings. 2012. <http://www.drugabuse.gov/publications/resource-guide>. Accessed on March 11.
10. Zgierska A AI, Brown RL, Mundt M, Fleming M. Screening and Brief Interventions for Unhealthy Drug Use in Primary Care: A Review of Evidence and Clinical Practice Guidelines. *J Fam Pract*, In review, 2014.
11. Back S, Moran-Santa Maria MM. Treatment of co-occurring anxiety disorders and substance use disorders. In: Basow DS, ed. *UptoDate*. Waltham, MA: UptoDate; 2013.
12. Ries RK, Fiellin DA. *Principles of Addiction Medicine*. Fifth ed. Chevy Chase, MD: Lippincourt, Williams & Wilkins; 2014.
13. Biery JR, Williford JH, Jr., McMullen EA. Alcohol craving in rehabilitation: assessment of nutrition therapy. *J Am Diet Assoc*. Apr 1991;91(4):463-466.
14. Ciraulo DA, Piechniczek-Buczek J, Iscan EN. Outcome predictors in substance use disorders. *Psychiatr Clin North Am*. Jun 2003;26(2):381-409.
15. National Sleep Foundation. How much sleep do we really need? <http://www.sleepfoundation.org/article/how-sleep-works/how-much-sleep-do-we-really-need>. Accessed February 21, 2014.
16. Weinstock J, Wadeson HK, VanHeest JL. Exercise as an adjunct treatment for opiate agonist treatment: review of the current research and implementation strategies. *Subst Abus*. 2012;33(4):350-360. DOI: 10.1080/08897077.2012.663327.
17. American College of Sports Medicine. *ACSM's Guidelines for Exercise Testing and Prescription*. 8th ed. Baltimore, MD: Lippincott, Williams, and Wilkins; 2009.
18. Miller WR. Researching the spiritual dimensions of alcohol and other drug problems. *Addiction*. Jul 1998;93(7):979-990.
19. Galanter M. Spirituality, evidence-based medicine, and alcoholics anonymous. *Am J Psychiatry*. Dec 2008;165(12):1514-1517. DOI: 10.1176/appi.ajp.2008.08050678.
20. Avants SK, Beitel M, Margolin A. Making the shift from 'addict self' to 'spiritual self': Results from a stage 1 study of spiritual self-schema (3-S) therapy for the treatment of addiction and HIV risk behavior. *Mental Health, Religion & Culture*. 2005;8(3):167-177.
21. Margolin A, Schuman-Olivier Z, Beitel M, Arnold RM, Fulwiler CE, Avants SK. A preliminary study of spiritual self-schema (3-S(+)) therapy for reducing impulsivity in HIV-positive drug users. *J Clin Psychol*. Oct 2007;63(10):979-999. DOI: 10.1002/jclp.20407.
22. Chiesa A, Serretti A. A systematic review of neurobiological and clinical features of mindfulness meditations. *Psychol Med*. Aug 2010;40(8):1239-1252. DOI: 10.1017/S0033291709991747.
23. Goyal M, Singh S, Sibinga EM, et al. Meditation Programs for Psychological Stress and Well-being: A Systematic Review and Meta-analysis. *JAMA Intern Med*. Jan 6 2014. DOI: 10.1001/jamainternmed.2013.13018.
24. Zgierska A, Rabago D, Chawla N, Kushner K, Koehler R, Marlatt A. Mindfulness meditation for substance use disorders: a systematic review. *Subst Abus*. Oct-Dec 2009;30(4):266-294. PMID: 2800788. DOI: 10.1080/08897070903250019.
25. Chiesa A, Serretti A. Are Mindfulness-Based Interventions Effective for Substance Use Disorders? A Systematic Review of the Evidence. *Subst Use Misuse*. Mar 5 2013. DOI: 10.3109/10826084.2013.770027.
26. Gelderloos P, Walton KG, Orme-Johnson DW, Alexander CN. Effectiveness of the Transcendental Meditation program in preventing and treating substance misuse: a review. *Int J Addict*. Mar 1991;26(3):293-325.
27. Dakwar E, Levin FR. The emerging role of meditation in addressing psychiatric illness, with a focus on substance use disorders. *Harv Rev Psychiatry*. 2009;17(4):254-267. PMID: 3109319. DOI: 10.1080/10673220903149135.

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28. McHugh RK, Hearon BA, Otto MW. Cognitive behavioral therapy for substance use disorders. *Psychiatr Clin North Am.* Sep 2010;33(3):511-525. PMID: 2897895. DOI: 10.1016/j.psc.2010.04.012.
29. Klimas J, Field CA, Cullen W, et al. Psychosocial interventions to reduce alcohol consumption in concurrent problem alcohol and illicit drug users. *Cochrane Database Syst Rev.* 2012;11:CD009269. DOI: 10.1002/14651858.CD009269.pub2.
30. Martin GW, Rehm J. The effectiveness of psychosocial modalities in the treatment of alcohol problems in adults: a review of the evidence. *Can J Psychiatry.* Jun 2012;57(6):350-358.
31. Baker AL, Thornton LK, Hiles S, Hides L, Lubman DI. Psychological interventions for alcohol misuse among people with co-occurring depression or anxiety disorders: a systematic review. *J Affect Disord.* Aug 2012;139(3):217-229. DOI: 10.1016/j.jad.2011.08.004.
32. Knapp WP, Soares BG, Farrel M, Lima MS. Psychosocial interventions for cocaine and psychostimulant amphetamines related disorders. *Cochrane Database Syst Rev.* 2007(3):CD003023. DOI: 10.1002/14651858.CD003023.pub2.
33. O'Farrell TJ, Clements K. Review of outcome research on marital and family therapy in treatment for alcoholism. *J Marital Fam Ther.* Jan 2012;38(1):122-144. PMID: 3270890. DOI: 10.1111/j.1752-0606.2011.00242.x.
34. McKellar J, Stewart E, Humphreys K. Alcoholics anonymous involvement and positive alcohol-related outcomes: cause, consequence, or just a correlate? A prospective 2-year study of 2,319 alcohol-dependent men. *J Consult Clin Psychol.* Apr 2003;71(2):302-308.
35. Moos RH, Moos BS. Participation in treatment and Alcoholics Anonymous: a 16-year follow-up of initially untreated individuals. *J Clin Psychol.* Jun 2006;62(6):735-750. PMID: 2220012. DOI: 10.1002/jclp.20259.
36. Kaskutas LA, Bond J, Avalos LA. 7-year trajectories of Alcoholics Anonymous attendance and associations with treatment. *Addict Behav.* Dec 2009;34(12):1029-1035. PMID: 2739250. DOI: 10.1016/j.addbeh.2009.06.015.
37. Moos RH, Moos, B.S. Treated and untreated alcohol-use disorders: Course and predictors of remission and relapse. *Evaluation Review.* 2007;31(6):564-584. DOI: 10.1177/0193841X07306749.
38. Moos RH. How and why twelve-step self-help groups are effective. *Recent Dev Alcohol.* 2008;18:393-412.
39. Tonigan JS. Alcoholics anonymous outcomes and benefits. *Recent Dev Alcohol.* 2008;18:357-372.
40. Krentzman AR. The Evidence Base for the Effectiveness of Alcoholics Anonymous: Implications for Social Work Practice. *Journal of Social Work Practice in the Addictions.* 2007;7(4):27-48.
41. Zemore SE, Subbaraman M, Tonigan JS. Involvement in 12-step activities and treatment outcomes. *Subst Abus.* 2013;34(1):60-69. PMID: 3558929. DOI: 10.1080/08897077.2012.691452.
42. Cho SH, Whang WW. Acupuncture for alcohol dependence: a systematic review. *Alcohol Clin Exp Res.* Aug 2009;33(8):1305-1313. DOI: 10.1111/j.1530-0277.2009.00959.x.
43. Natural Standard Bottom Line Monograph. Addictions. Natural Standard. Available at: <http://www.naturalstandard.com/databases/effectiveness/all/condition-addictions.asp>. Accessed August 5, 2013.
44. Liu TT, Shi J, Epstein DH, Bao YP, Lu L. A meta-analysis of acupuncture combined with opioid receptor agonists for treatment of opiate-withdrawal symptoms. *Cell Mol Neurobiol.* Jun 2009;29(4):449-454. PMID: 3689320. DOI: 10.1007/s10571-008-9336-4.
45. Jordan JB. Acupuncture treatment for opiate addiction: a systematic review. *J Subst Abuse Treat.* Jun 2006;30(4):309-314. DOI: 10.1016/j.jsat.2006.02.005.

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46. Kim YH, Schiff E, Waalen J, Hovell M. Efficacy of acupuncture for treating cocaine addiction: a review paper. *J Addict Dis.* 2005;24(4):115-132.
47. Pekala RJ, Maurer R, Kumar VK, et al. Self-hypnosis relapse prevention training with chronic drug/alcohol users: effects on self-esteem, affect, and relapse. *Am J Clin Hypn.* Apr 2004;46(4):281-297.
48. Reader M, Young R, Connor JP. Massage therapy improves the management of alcohol withdrawal syndrome. *J Altern Complement Med.* Apr 2005;11(2):311-313. DOI: 10.1089/acm.2005.11.311.
49. Mays KL, Clark DL, Gordon AJ. Treating addiction with tunes: a systematic review of music therapy for the treatment of patients with addictions. *Subst Abus.* 2008;29(4):51-59. DOI: 10.1080/08897070802418485.
50. Mishra BR, Nizamie SH, Das B, Praharaj SK. Efficacy of repetitive transcranial magnetic stimulation in alcohol dependence: a sham-controlled study. *Addiction.* Jan 2010;105(1):49-55. DOI: 10.1111/j.1360-0443.2009.02777.x.
51. Scott W, Kaiser D, Othmer S, Sideroff S. Effects of an EEG biofeedback protocol on a mixed substance abusing population. *Am J Drug Alcohol Abuse.* 2005;31:455-469.
52. Ward J, Rosenbaum C, Herson C, McCurdy CR, Boyer EW. Herbal medicines for the management of opioid addiction: safe and effective alternatives to conventional pharmacotherapy? *CNS Drugs.* Dec 1 2011;25(12):999-1007. DOI: 10.2165/11596830-000000000-00000.