

Best Practices for Treating Mental Health and Substance Use Disorders



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Literature Review

Submitted to:

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Best Practices for Treating Mental Health and Substance Use Disorders

Introduction

Boulder County believes that all people should have the opportunity to live a safe and healthy life. To achieve that end, Boulder County Public Health (BCPH) is addressing behavioral health in the community through a multi-faceted approach to improve the lives of individuals, their families, and the health of the whole community. Mental health and substance use disorders are common, recurrent, and treatable (SAMHSA, 2013), yet the most effective methods for addressing these issues are not always apparent or implemented. In an effort to ensure Boulder County is delivering the highest quality of services to its community members who are in need of treatment for mental health, substance use, and/or behavioral health disorders, a comprehensive literature review was conducted to identify evidence-based best practices for treatment and prevention services for individuals with behavioral health needs across service settings.

The topic areas included in this review were identified in collaboration with Boulder County health professionals, including public health administrators, educators, law enforcement leadership, treatment providers, and other stakeholders. Stakeholders identified two guiding perspectives for the information to be included in the review.

1. **Developmental Perspective.** A developmental framework takes into account that mental health and/or substance use disorders are more likely to originate during particular ages or stages across the lifespan, and that disorders may worsen or improve as individuals develop physically, cognitively, and socially (SAMHSA, 2013). As they age, individuals' biological, psychological and social characteristics can change, as can the physical, legal, and political environments that surround them.
2. **Service Setting.** The setting in which an individual receives treatment is critical to consider when identifying best practices and the context for implementation. To facilitate use of this review for stakeholders across systems and settings, best practices are organized by service setting. To the extent possible, the review includes information that spans the health continuum: prevention, early intervention, treatment, harm reduction, promising and/or innovating practices, and community organization/mobilization.

The review synthesizes the most current findings from peer-reviewed health journals and other literature relevant to treating mental health and substance use disorders. Within each service setting, best practices for treatment are summarized, followed by a summary of considerations specific to the setting and/or populations served within the setting. The review concludes with cross-system considerations for treatment practices.

For the purposes of this review, a practice is considered "best" when it:

- 1) is evidence-based,
- 2) incorporates the latest developments, trends, and recommendations in health research,
- 3) is borne of applied scientific study and is feasible,
- 4) follows an ethic of care for clients/consumers of services, and
- 5) is appropriate for use/application in Boulder County.

Background

Mental Health Disorders

"Mental health disorders" encompass cognitive, behavioral or emotional disorders that interfere with a person's ability to function in their daily life and maintain positive relationships with others, often resulting in a reduced ability to cope with routine daily activities such as going to work or raising a family (Kessler, Chiu, Demler, & Walters, 2005). Mental health disorders include a wide range of diagnosable illnesses such as major depression, bipolar disorder, obsessive compulsive disorder, and post-traumatic stress disorder (CDC, 2012). The consequences of mental health disorders for individuals are significant (e.g., decreased quality of life and social problems), as are their impact on communities (e.g., lowered productivity and poverty), and criminal justice systems (Lund et al., 2011).

Substance Use Disorders

Substance use disorders span a range of progressive physiological and behavioral conditions that are associated with continued use of alcohol, tobacco, or illicit drugs, and result in adverse consequences. Consequences of substance use disorders include clinically significant impairments such as health problems or disability, failures to meet major responsibilities at work school or home, and/or financial or legal troubles (SAMHSA, 2019a). Alcohol, tobacco, marijuana, and opioids are the most common substances involved in substance use disorders (SAMHSA, 2019b). While alcohol is the most commonly used substance (Lipari & Van Horn, 2017), opioid use is on the rise in the U.S. On average, 130 Americans die daily from an opioid overdose (CDC, 2018). Opioids include prescription drugs such as hydrocodone, oxycodone, morphine, and codeine. While many people benefit from using prescription drugs to effectively manage pain, use frequently results in disorders.

Co-Occurring Disorders

Researchers have established as recently as the 1980s that there is a significant relationship between mental health and substance use disorders (Drake, Mueser, Brunette, & McHugo, 2004). Individuals who experience at least one mental health disorder and at least one substance use disorder simultaneously are considered to have co-occurring disorders (SAMHSA, 2005). In 2017, approximately 8.1 percent of U.S. adults were identified as having a co-occurring disorder (USDHHS, 2018). There are distinct implications for the causes, treatment, and health outcomes for co-occurring disorders (Drake et al., 2004). While no specific combinations of mental health

and substance use disorders are required for a co-occurring diagnosis, some of the most common mental disorders that co-occur are anxiety and mood disorders, schizophrenia, bipolar, and major depressive disorder (SAMHSA, 2019c). The most common substances used by patients experiencing mental health disorders are alcohol, tobacco, opioids, and other stimulants (SAMHSA, 2019c). There is a separate literature addressing the co-occurrence of disorders (Drake, O'Neal, & Wallach, 2008) which is addressed in the Treatment section of this review.

Boulder County Context

In Boulder County, the rates of mental health and substance use issues reflect a population in need of services and support. A recent survey in the county indicated that 95% of people were either directly or indirectly affected by a mental health or substance use issue, with 43% reporting having a mental health or substance use issue themselves (BCDHHS, 2016). Although reports of poor mental health are lower than in the state, more than 1 in 10 (11.3%) individuals in the county report poor mental health in the past 30 days (BCPH, 2019a).

Alcohol and other substance use are a pervasive issue in Boulder County. Adult binge drinking in the county is higher than in CO (19% vs. 18%) and average rates of marijuana use for adults in the county are higher than for the state overall (20% vs. 13%) (CDPHE, 2019c). Boulder Valley School District reports higher average rates of alcohol use than the state (35% vs. 29%, CDPHE, 2019a). Students report early initiation of alcohol use (11.1%) and two-thirds report that it is easy to access alcohol (CDPHE, 2019b). One third of teens in Boulder County report that they are regular electronic nicotine product (Juul/e-cigarette) users (BCPH, 2019b). Since 2005, drug overdose deaths are now the leading cause of accidental deaths in the county, surpassing motor vehicle accidents (BCPH, n.d.). Drug use is also more commonly involved in suicides and homicides in Boulder than in the state (25.1% vs. 18.2% across 5 types of substances, CDPHE, 2019e).

The county has an opportunity to improve behavioral health outcomes and population health through the implementation of best practices across treatment settings. This review highlights best practices for treatment of mental health and substance use issues across settings where care may be provided for individuals throughout the lifespan and with differing levels of need. Providers across the county may consider these best practices as they continue to evolve and expand services to meet the needs of individuals in the county.

In the sections that follow, best practices for settings in which individuals are commonly treated for mental health and substance use disorders are outlined. In each section, guiding best practices are defined and explained and, when applicable, additional special considerations that may support the guiding best practices are also outlined. The sections are organized in a way such that readers can reference only those sections specific to a setting, or use the report in its entirety to more broadly inform and guide treatment practices in Boulder County.

References

- Boulder County Department of Housing and Human Services [BCDHHS]. (2016). Community of Hope Mental Health Community Assessment. Retrieved from: <https://assets.bouldercounty.org/wp-content/uploads/2017/04/community-of-hope-mental-health-community-assessment.pdf>
- Boulder County Department of Public Health [BCPH]. (n.d.). Overdose Awareness Day Talking Points. Retrieved from: <https://assets.bouldercounty.org/wp-content/uploads/2017/03/overdose-talking-points.pdf>
- Boulder County Department of Public Health [BCPH]. (2019a). Boulder County Health Compass: Adult Days in Poor Mental Health (2013-2014). Retrieved from: <http://www.bouldercountyhealthcompass.org/indicators>
- Boulder County Department of Public Health [BCPH]. (2019b). Status of Children in Boulder County 2018. Retrieved from: <https://assets.bouldercounty.org/wp-content/uploads/2019/08/Status-of-Children-2018.pdf>
- Centers for Disease Control and Prevention [CDC]. (2012). Mental Health and Chronic Diseases Issue Brief. Retrieved from: <https://www.cdc.gov/workplacehealthpromotion/tools-resources/pdfs/issue-brief-no-2-mental-health-and-chronic-disease.pdf>
- Centers for Disease Control and Prevention [CDC]. (2018). Understanding the epidemic. Retrieved from: <https://www.cdc.gov/drugoverdose/epidemic/index.html>
- Colorado Department of Public Health & Environment [CDPHE]. (2019a). VISION: Visual Information System for Identifying Opportunities and Needs: Data by County, Binge Drinking Adults, 2013-2015. Retrieved from: <https://www.colorado.gov/pacific/cdphe/vision-data-tool>
- Colorado Department of Public Health & Environment [CDPHE]. (2019b). Health Kids Colorado Survey Data (2017). Retrieved from: <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data>
- Colorado Department of Public Health & Environment [CDPHE]. (2019c). VISION: Visual Information System for Identifying Opportunities and Needs: Data by County, Marijuana use, current – Adults (2015-2017). Retrieved from: <https://www.colorado.gov/pacific/cdphe/vision-data-tool>
- Colorado Department of Public Health & Environment [CDPHE]. (2019d). Birth, death and other vital records. Retrieved from: <https://www.colorado.gov/pacific/cdphe/categories/services-and-information/birth-death-and-other-vital-records>
- Colorado Department of Public Health & Environment [CDPHE]. (2019e). Colorado Violent Death Reporting System: HSR 16 Boulder and Broomfield. Retrieved from: <https://www.colorado.gov/pacific/cdphe/colorado-violent-death-reporting-system>
- Colorado Department of Public Health & Environment [CDPHE]. (2019f). 2017 county Maternal and Child Health trend analyses. Retrieved from: <https://www.colorado.gov/pacific/cdphe/mch-data-and-reports>
- Colorado Health Institute. (2017). 2017 Colorado Health Access Survey (CHAS) Regional Data. Retrieved from: <https://www.coloradohealthinstitute.org/data>
- Drake, R. E., Mueser, K. T., Brunette, M. F., & McHugo, G. J. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatric Rehabilitation Journal*, 27(4), 360.
- Drake, R. E., O'Neal, E. L., & Wallach, M. A. (2008). A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. *Journal of Substance Abuse Treatment*, 34(1), 123-138.
- Early Childhood Leadership Commission [ECLC]. (2011). Colorado Early Childhood Needs Assessment. Retrieved from: https://www.colorado.gov/pacific/sites/default/files/PF_MCH_Colorado-Early-Childhood-Needs-Assessment.pdf
- Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 617-627.
- Lipari, R. N., & Van Horn, S. L. (2017). Trends in substance use disorders among adults aged 18 or older. In *The CBHSQ Report*. Substance Abuse and Mental Health Services Administration (US).
- Lund, C., De Silva, M., Plagerson, S., Cooper, S., Chisholm, D., Das, J., ... & Patel, V. (2011). Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. *The Lancet*, 378(9801), 1502-1514.

Substance Abuse and Mental Health Services Administration [SAMHSA]. (2005). Substance Abuse Treatment for Persons with Co-Occurring Disorders. Treatment Improvement Protocol (TIP) Series, No. 42. HHS Publication No. (SMA)133992. Rockville, MD: Substance Abuse and Mental Health Services Administration

Substance Abuse and Mental Health Services Administration [SAMHSA]. (2013). Behavioral Health, United States, 2012. HHS Publication No. (SMA) 13-4797. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Substance Abuse and Mental Health Services Administration [SAMHSA]. (2019a). Mental Health and Substance Use Disorders. Retrieved from: <https://www.samhsa.gov/find-help/disorders>

Substance Abuse and Mental Health Services Administration [SAMHSA]. (2019b). Alcohol, tobacco, and other drugs. Retrieved from: <https://www.samhsa.gov/find-help/atod>

Substance Abuse and Mental Health Services Administration [SAMHSA]. (2019c). Common Comorbidities. Retrieved from: <https://www.samhsa.gov/medication-assisted-treatment/treatment/common-comorbidities>

U.S. Department of Health and Human Services [USDHHS]. (2018). SAMHSA's Annual Mental Health, Substance Use Data Provide Roadmap for Future Action. Retrieved from: <https://www.hhs.gov/about/news/2018/09/14/samhsa-annual-mental-health-substance-use-data-provide-roadmap-for-future-action.html>

Best Practices for Treating Mental Health and Substance Use Disorders in Primary Care and Hospital Settings

Primary care and hospital settings offer broad, basic healthcare, rather than specialized services, for people often making their first contact with a doctor or nurse. Thus, primary care can be the initial point of contact for many individuals with mental health and/or substance use issues. Research demonstrates that more Americans receive mental health and substance use disorder care from primary care physicians than from specialists (Unützer & Park, 2012).

Guiding Best Practices

Integrating Behavioral Health Services into Primary Care and Hospital Settings

What is it? The leading best practice within primary care and hospital settings, supported by the American Academy of Family Physicians (2018), is the integrated and coordinated delivery of mental health care and substance use disorder services within hospitals and primary care and hospital settings.

Key Features and Benefits:

- Primary care physicians routinely establish trust with their patients and can solicit open and honest information about their mental health or substance use issues, whereas specialists may need to take time to establish that same trust (McBride, 2016). Furthermore, the regularity of primary care visits can facilitate ongoing monitoring of a patient's condition or the identification of new health conditions.
- When different health needs are treated separately there can be ineffective communication between providers and important health information may be lost (Ross et al., 2015; Post, Metzger, Dumas, & Lehmann, 2010). Primary care providers are in a unique position to treat patients holistically, allowing for more patient-centered and effective care.
- Patients prefer collaborative models of primary health care where physical health, mental health, and substance use can be treated in the same setting (Ross et al., 2015; Post et al., 2010).
- Receiving all health services in one setting is beneficial to patients who are concerned about stigma (Knaak, Mantler, & Szeto, 2017) because routine primary health care is typically not stigmatized.
- Studies have found that integrated care models facilitate counseling, medication management, and collaboration with primary care physicians, may be particularly beneficial to patients with anxiety and attention deficit-hyperactivity disorder, and are associated with improvements in physical health (Rushton, Fant, & Clark, 2013).

- Substance use disorders are medical conditions, and their treatment affects other mental and physical health conditions (SAMHSA & OSG, 2016). Integrating substance use and mental health services early in the care system can reduce overall healthcare costs to individuals and communities (Wachino, 2015).

Considerations for Implementation:

The National Academy for State Health Policy (Townley & Dorr, 2017) recommends implementing the following practices as a part of primary care's role in identifying, managing, and treating substance use disorders:

- **Screening, Brief Intervention, and Referral to Treatment (SBIRT).** SBIRT is an evidence-based practice that is used to identify, reduce, and prevent substance-related disorders (Bien, Miller, & Tonigan, 1993). SBIRT is comprised of three components that fit well within the primary care setting, as they are designed to serve people who are experiencing consequences related to substance use but may not be seeking help from a primary care provider for a substance use problem explicitly (SAMHSA, n.d.). First, screening using short-form instruments (e.g., NIAAA, n.d.) that can be administered in a few minutes identifies primary care patients who may be at risk for substance use issues but have not yet reached diagnostic criteria for a disorder. Brief interventions typically lasting between 5 and 30 minutes are then employed that use motivational interviewing or cognitive behavioral therapy to increase the patient's insight or awareness regarding their risks related to substance use. If a patient requires more advanced treatment, a referral process is employed to help the patient select treatment facilities and navigate barriers to accessing treatment.
- **Medication-Assisted Treatment (MAT) for Alcohol and Opioid Use Disorders.** With additional training, primary care providers can provide direct treatment for alcohol and opioid use disorders using federally approved medications (Townley & Dorr, 2017). The integration of MAT into primary care settings expands access to treatment for those who need it, especially individuals with opioid use disorders (Korthuis et al., 2017). See the Treatment Settings section for best practices associated with MAT.
- **Provider Education and Training.** An important aspect of integrating mental health and substance use disorder treatment into primary care is the confidence and abilities of physicians to deliver such care (Harris & Yu, 2016). Targeted education and training can increase provider comfort and confidence in utilizing evidence-based tools for addressing individuals' treatment needs. State medical boards' continuing medical education requirements may be leveraged as an opportunity for training in substance use disorder treatment, prescribing practices, and reducing stigma related to disorders.
- **Prescription Drug Monitoring Programs.** PDMPs use electronic databases to track the prescribing and dispensing of opioids and other controlled substances. The databases can be used by health care providers to identify individuals who may be using prescription drugs in illegal or otherwise non-subscribed ways (Townley & Dorr, 2017). The success of PDMPs rely heavily on the degree to which physicians are knowledgeable of the monitoring database (Rutkow et al., 2015) and are trained on how to respond to the information provided in a PDMP report (Lee et al., 2015). In primary care, the use of PDMP reports provide an opportunity for physicians to identify problematic prescription drug use with their patient and work with them to institute a care plan for their addiction (Lee et al, 2015).
- **Vulnerable Populations.** Efforts should be made to provide access to care for traditionally vulnerable populations (e.g. cultural or racial minorities, the elderly, high-risk individuals or

groups). Evidence-based engagement strategies that can facilitate access for these populations include emphasizing cultural sensitivity; training and supporting family advocates and peer educators; reducing stigma; and promotion of self-advocacy and empowerment (Garland et al., 2013).

Collaborative Care and Effective Handoffs

What is it?

Collaborative care is an approach by which primary care physicians are systematically supported across disciplinary settings by mental health and/or substance use providers when caring for a caseload of patients. Collaborative care models (CCM) vary in their implementation and can include multidisciplinary teams, organized leadership support, coordinated clinical information systems, patient self-management support, and connecting patients and community resources (Woltmann et al., 2012). The main purpose of CCMs is to enhance the holistic treatment of patients by establishing collaborations between generalist and specialist professionals who deliver treatment services for specific needs (Community Preventive Services Task Force, 2012).

Key Features and Benefits:

- CCMs used in primary care increase the quality, access, and feasibility of care for patients with complex needs (Ross et al., 2015).
- Collaborative care helps to strengthen communication across healthcare professionals, teams, and settings.
- CCMs are a cost-efficient strategy for primary care settings that seek to integrate mental health and/or substance use disorder treatment into their practices (Goodrich, Kilbourne, Nord, & Bauer, 2013; Woltmann et al., 2012).

Considerations for Implementation:

Core components of effective collaborative care programs include the following (Patel et al., 2013; Ngo et al., 2013; Post et al., 2010):

- A focus on population-based care by identifying panels of high-risk patients.
- A shift from intermittent, episodic, or urgent care to a system where patients are systematically tracked via a registry to monitor whether their health problem has been resolved during caseload review.
- Maintaining regular and effective communication between primary care physicians and mental health or substance use treatment professionals, including developing collaborative relationships rather than simply making referrals.
- Stepped care in which treatments are systematically adjusted and “stepped up” if patients are not improving as expected (Von Korff, & Tiemens, 2000).
- “Treatment to target” in which treatment and medication contingencies are actively adjusted until the desired health outcomes are achieved.
- Training primary care and support clinicians in integrated care, as well as training office support staff to be knowledgeable in behavioral health care support (e.g., proactive tracking of medication adherence, medication side effects, etc.).

To support CCMs, systems for effective handoffs between providers are recommended. Handoffs are a process by which relevant information about a patient's care is communicated systematically between providers and settings (Joint Commission, 2008). The collaborative integration of mental health and/or substance use disorder care into primary care involves coordination between staff at multiple levels of service delivery, and potentially across systems in the case of a CCM. Without effective handoffs, communication breakdowns can occur and result in medical errors or patient non-adherence to treatment (Riesenberg, Leisch, & Cunningham, 2010).

In addition to ensuring seamless transitions of care in patient referrals, the handoff process can also be an opportunity to increase patient engagement with their treatment plan by enhancing reciprocal communication between the primary care physician, patient, and behavioral treatment provider, also known as a “warm handoff” (Cohen et al., 2015). A warm handoff process can range from the primary physician alerting the behavioral care provider of the referral instead of merely providing the patient with the behavioral care contact information, to facilitating an in-person introduction between all parties (ACOG, 2007). Warm handoff processes vary due to organizational capacity and type of referral (Pace et al., 2018), but most warm handoffs will involve encouraging a patient (and/or their family members) to ask questions and clarify any information being exchanged between providers, and building relationships (Davis et al., 2015).

Special Considerations

Needs of Specific Populations

The specific needs of certain populations require additional consideration and adaptations for successful integration of behavioral health care into primary care settings. This section considers the needs both of pregnant individuals and pediatric/youth populations within the primary care context.

- **Pregnant/neonatal populations.** Pregnancy is a period of high risk because of complications for both mother and babies that might arise as the result of behavioral health issues, notwithstanding the risks associated with birth (Gavin et al., 2005). Perinatal and post-partum depression and anxiety are common; primary care holds a vital role for screening, treating and providing referrals to mental health care for women experiencing mental health disorders during and after pregnancy (Muzik & Borovska, 2010). Depression and other mental health disorders can result in negative consequences for mothers including substance use, poor nutrition, and interpersonal relationship turmoil (Wisner et al., 2009). By virtue of having a longitudinal relationship with families, the primary care physician can identify maternal depression and help prevent negative developmental and mental health outcomes for the infant and family (Earls & Committee on Psychosocial Aspects of Child and Family Health, 2010).
- **Pediatric/youth populations.** Behavioral health care for pediatric populations is important because of the multiple critical and sensitive developmental periods they experience (Heim & Binder, 2012). A great deal of mental health and or substance use disorders experienced by adults originate early on, making primary care an ideal setting to deliver health interventions and preventive care (Asarnow & Miranda 2014). Multiple developmental changes in cognitive, emotional, and physical functioning in youth and adolescents make

these populations especially vulnerable to risk behaviors (Tolan & Dodge, 2005; Tylee et al., 2007). Youth may not yet be able to understand health risks and tend not to disclose their risk behaviors unless prompted (Kramer & Garralda, 2000). The role of primary care in treating youth for mental health and substance use disorders involves beneficial elements of routine health screenings (e.g., annual screenings required by schools, immunizations), and longitudinal youth/pediatrician relationships (Kulig, 2005).

A promising practice in connecting youth to health care services is wraparound services. Wraparound is a planning process that results in community services being “wrapped around” a child and their family in their natural environment (Burns & Goldman, 1999). In the process, a child’s family meets with an interdisciplinary team of providers selected by them, and together with the aid of a care coordinator they develop a plan for addressing all aspects of the child’s treatment (goals, services, funding, etc.). Wraparound-planned services vary widely in their implementation and structures but share core principles of being strengths-based, integrated, and involving family members as active partners in the process (Winters & Metz, 2009). Wraparound is endorsed by SAMHSA’s Center for Medicare & Medicaid Services as an employer-sponsored benefit (Mann & Hyde, 2013).

Emergency Departments (ED)

Ideally patients with mental health and/or substance use disorders are diverted away from emergency services and into treatment, however the ED is a frequent setting of initial treatment and stabilization for individuals in crisis (Downey, Zun, & Gonzales, 2009). The ED is yet another entry point where people receive care when they are in the greatest distress and often before admission to more formalized care (Larkin et al., 2009). Patient experiences in an ED may have long-lasting effects depending on the interactions that occur, and the treatment received (Stromberg & Stefan, 2008). If patients receive effective referrals to treatment out of the ED, they are less likely to have subsequent ED visits as they relate to behavioral health crisis. In addition to medical needs, ED staff should be trained in the signs and symptoms of mental illness and substance use disorders in individuals experiencing acute distress (Stromberg & Stefan, 2008).

References

- American Academy of Family Physicians. (2018). Mental health Care Services by Family Physicians Position Paper. Retrieved from: <https://www.aafp.org/about/policies/all/mental-services.html>
- American College of Obstetricians and Gynecologists [ACOG]. (2007). Communication strategies for patient handoffs. *Obstetrics & Gynecology*, 109, 1503-1504.
- Asarnow, J. R., & Miranda, J. (2014). Improving care for depression and suicide risk in adolescents: Innovative strategies for bringing treatments to community settings. *Annual Review of Clinical Psychology*, 10, 275-303.
- Bien, T. H., Miller, W. R., & Tonigan, J. S. (1993). Brief interventions for alcohol problems: a review. *Addiction*, 88(3), 315-336.
- Burns, B. J., & Goldman, S. K. (1999). Promising Practices in Wraparound for Children with Serious Emotional Disturbance and Their Families. Systems of Care: Promising Practices in Children's Mental Health 1998 Series. Volume IV.
- Cohen, D. J., Balasubramanian, B. A., Davis, M., Hall, J., Gunn, R., Stange, K. C., ... & Clark, K. (2015). Understanding care integration from the ground up: five organizing constructs that shape integrated practices. *The Journal of the American Board of Family Medicine*, 28(Supplement 1), S7-S20.
- Community Preventive Services Task Force. (2012). Recommendation from the community preventive services task force for use of collaborative care for the management of depressive disorders. *American Journal of Preventive Medicine*, 42(5), 521-524.
- Davis, M. M., Balasubramanian, B. A., Cifuentes, M., Hall, J., Gunn, R., Fernald, D., ... & Cohen, D. J. (2015). Clinician staffing, scheduling, and engagement strategies among primary care practices delivering integrated care. *The Journal of the American Board of Family Medicine*, 28(Supplement 1), S32-S40.
- Downey, L. V. A., Zun, L. S., & Gonzales, S. J. (2009). Utilization of Emergency Department by Psychiatric Patients. *Primary Psychiatry*, 16(4).
- Earls, M. F., & Committee on Psychosocial Aspects of Child and Family Health. (2010). Incorporating recognition and management of perinatal and postpartum depression into pediatric practice. *Pediatrics*, 126(5), 1032-1039.
- Garland, A. F., Haine-Schlagel, R., Brookman-Frazee, L., Baker-Ericzen, M., Trask, E., & Fawley-King, K. (2013). Improving community-based mental health care for children: Translating knowledge into action. *Administration and Policy in Mental Health and Mental Health Services Research*, 40(1), 6-22.
- Gavin, N. I., Gaynes, B. N., Lohr, K. N., Meltzer-Brody, S., Gartlehner, G., & Swinson, T. (2005). Perinatal depression: a systematic review of prevalence and incidence. *Obstetrics & Gynecology*, 106(5), 1071-1083.
- Goodrich, D. E., Kilbourne, A. M., Nord, K. M., & Bauer, M. S. (2013). Mental health collaborative care and its role in primary care settings. *Current Psychiatry Reports*, 15(8), 383.
- Harris, B. R., & Yu, J. (2016). Attitudes, perceptions and practice of alcohol and drug screening, brief intervention and referral to treatment: a case study of New York State primary care physicians and non-physician providers. *Public Health*, 139, 70-78.
- Heim, C., & Binder, E. B. (2012). Current research trends in early life stress and depression: Review of human studies on sensitive periods, gene-environment interactions, and epigenetics. *Experimental Neurology*, 233(1), 102-111.
- Joint Commission. (2008). National patient safety goals. Hand-off communications: standardized approach [NPSG. 02.05. 01]. 2008. *Joint Commission Perspectives*, 28, 7.
- Knaak, S., Mantler, E., & Szeto, A. (2017, March). Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. In *Healthcare management forum* (Vol. 30, No. 2, pp. 111-116). Sage CA: Los Angeles, CA: SAGE Publications.
- Korthuis, P. T., McCarty, D., Weimer, M., Bougatsos, C., Blazina, I., Zakher, B., ... & Chou, R. (2017). Primary care-based models for the treatment of opioid use disorder: A scoping review. *Annals of Internal Medicine*, 166(4), 268-278.
- Kramer, T., & Garraalda, M. E. (2000). Child and adolescent mental health problems in primary care. *Advances in Psychiatric Treatment*, 6(4), 287-294.

- Kulig, J. W. (2005). Tobacco, alcohol, and other drugs: the role of the pediatrician in prevention, identification, and management of substance abuse. *Pediatrics*, 115(3), 816-821.
- Larkin, G. L., Beautrais, A. L., Spirito, A., Kirrane, B. M., Lippmann, M. J., & Milzman, D. P. (2009). Mental health and emergency medicine: a research agenda. *Academic Emergency Medicine*, 16(11), 1110-1119.
- Lee, J., Kresina, T. F., Campopiano, M., Lubran, R., & Clark, H. W. (2015). Use of pharmacotherapies in the treatment of alcohol use disorders and opioid dependence in primary care. *BioMed Research International*, 2015.
- Mann, C. & Hyde, P. (2013). Coverage of Behavioral Health Services for Children, Youth, and Young Adults with Significant Mental Health Conditions (Joint CMCS and SAMHSA Informational Bulletin). Retrieved from: <https://www.medicaid.gov/federal-policy-guidance/downloads/cib-05-07-2013.pdf>
- McBride, J. L. (2016). Family physician support for a family with a mentally ill member. *The Annals of Family Medicine*, 14(5), 460-462.
- Muzik, M., & Borovska, S. (2010). Perinatal depression: implications for child mental health. *Mental Health in Family Medicine*, 7(4), 239.
- National Institute on Alcohol Abuse and Alcoholism [NIAAA]. (n.d.) How to help patients who drink too much: A Clinical Approach Step 1. Retrieved from: https://pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians_guide5_help_p.htm
- Ngo, V. K., Rubinstein, A., Ganju, V., Kanellis, P., Loza, N., Rabadan-Diehl, C., & Daar, A. S. (2013). Grand challenges: integrating mental health care into the non-communicable disease agenda. *PLoS Medicine*, 10(5), e1001443.
- Pace, C. A., Gergen-Barnett, K., Veidis, A., D'Afflitti, J., Worcester, J., Fernandez, P., & Lasser, K. E. (2018). Warm Handoffs and Attendance at Initial Integrated Behavioral Health Appointments. *The Annals of Family Medicine*, 16(4), 346-348.
- Patel, V., Belkin, G. S., Chockalingam, A., Cooper, J., Saxena, S., & Unützer, J. (2013). Grand challenges: integrating mental health services into priority health care platforms. *PLoS Medicine*, 10(5), e1001448.
- Post, E. P., Metzger, M., Dumas, P., & Lehmann, L. (2010). Integrating mental health into primary care within the Veterans Health Administration. *Families, Systems, & Health*, 28(2), 83.
- Riesenberg, L. A., Leisch, J., & Cunningham, J. M. (2010). Nursing handoffs: a systematic review of the literature. *AJN The American Journal of Nursing*, 110(4), 24-34.
- Ross, L. E., Vigod, S., Wishart, J., Waese, M., Spence, J. D., Oliver, J., ... & Shields, R. (2015). Barriers and facilitators to primary care for people with mental health and/or substance use issues: a qualitative study. *BMC Family Practice*, 16(1), 135.
- Rushton, J. L., Fant, K. E., & Clark, S. J. (2004). Use of practice guidelines in the primary care of children with attention-deficit/hyperactivity disorder. *Pediatrics*, 114(1), e23-e28.
- Rutkow, L., Turner, L., Lucas, E., Hwang, C., & Alexander, G. C. (2015). Most primary care physicians are aware of prescription drug monitoring programs, but many find the data difficult to access. *Health Affairs*, 34(3), 484-492.
- Substance Abuse and Mental Health Administration [SAMHSA]. (n.d.) SBIRT: Screening, Brief Intervention, and Referral to Treatment Opportunities for Implementation and Points for Consideration Issue Brief. Retrieved from: https://www.integration.samhsa.gov/sbirt_issue_brief.pdf
- Substance Abuse and Mental Health Administration [SAMHSA] & U.S. Office of the Surgeon General [OSG]. (2016). Health Care Systems and Substance Use Disorders. In *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. US Department of Health and Human Services. Retrieved from: <https://addiction.surgeongeneral.gov/sites/default/files/chapter-6-health-care-systems.pdf>
- Stromberg, N. & Stefan, S. (2008) Best practice guidelines for the treatment of individuals with behavioral health problems in emergency departments. Retrieved from: https://www.nasmhpd.org/sites/default/files/l_5_MAEDBestPracticeGuidelines.pdf
- Tolan, P. H., & Dodge, K. A. (2005). Children's mental health as a primary care and concern: a system for comprehensive support and service. *American Psychologist*, 60(6), 601.

Townley, C., & Dorr, H. (2017). Integrating substance use disorder treatment and primary care. In *National Academy for State Health Policy, February 2017*. Retrieved from: <https://nashp.org/wp-content/uploads/2017/02/Primary-Care-Integration-Brief.pdf>

Tylee, A., Haller, D. M., Graham, T., Churchill, R., & Sanci, L. A. (2007). Youth-friendly primary-care services: how are we doing and what more needs to be done? *The Lancet*, 369(9572), 1565-1573.

Unützer, J., & Park, M. (2012). Strategies to improve the management of depression in primary care. *Primary Care: Clinics in Office Practice*, 39(2), 415-431.

Von Korff, M., & Tiemens, B. (2000). Individualized stepped care of chronic illness. *Western Journal of Medicine*, 172(2), 133.

Wachino, V. (2015). Re: New service delivery opportunities for individuals with a substance use disorder. (SMD # 15-003). Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. Retrieved from: <https://www.medicaid.gov/federal-policy-guidance/downloads/SMD15003.pdf>.

Winters, N. C., & Metz, W. P. (2009). The wraparound approach in systems of care. *Psychiatric Clinics of North America*, 32(1), 135-151.

Wisner, K. L., Sit, D. K., Hanusa, B. H., Moses-Kolko, E. L., Bogen, D. L., Hunker, D. F., ... & Singer, L. T. (2009). Major depression and antidepressant treatment: impact on pregnancy and neonatal outcomes. *American Journal of Psychiatry*, 166(5), 557-566.

Woltmann, E., Grogan-Kaylor, A., Perron, B., Georges, H., Kilbourne, A. M., & Bauer, M. S. (2012). Comparative effectiveness of collaborative chronic care models for mental health conditions across primary, specialty, and behavioral health care settings: systematic review and meta-analysis. *American Journal of Psychiatry*, 169(8), 790-804.

Best Practices for Treating Mental Health and Substance Use Disorders in Elementary and High Schools

Although schools' primary function is to provide education, they serve as a natural access point for children across diverse subpopulations to receive health services (Richardson & Juszczak, 2008; O'Connell, Boat, & Warner, 2009). School-based interventions have the potential to educate youth about mental health issues and decrease stigma (Essler, Arthur, & Stickley, 2006). This section of the review focuses on guiding best practices for treatment of behavioral health in school-based settings organized across four domains: comprehensive behavioral health systems within schools; prevention; school policies; and personnel.

In order to be effective, mental and behavioral health services for school-aged children should aim to employ support systems with an emphasis on each ecological domain (e.g., family, school, home, community) (Trach, Lee, & Hymel, 2018). Services should focus on the holistic behavioral needs of a child rather than on a single problem behavior, as children's emotional and/or behavioral problems are often interrelated with one another and have shared risk factors (National Research Council, 2002). Additionally, research shows that the developmental age and grade-level differences of youth should be reflected in the content and focus areas of alcohol, tobacco, and other drugs prevention strategies (Bruckner et al., 2014; National Research Council, 2009). For example, kindergarten and first grade level prevention strategies should focus on general prevention related skills such as promotion of social skills, communication and assertiveness. For middle and high school aged youth, strategies should focus on education about the biological and behavioral consequences of using alcohol and drugs. For high school aged youth, who are more likely to experiment with substances, prevention strategies should become more nuanced and strategic, such as by focusing on the negative effects of drug use and peer pressure to use (Seitz et al., 2013).

Guiding Best Practices

Comprehensive School-Based Behavioral Health Systems

What is it?

The Substance Abuse and Mental Health Services Administration (SAMHSA) and the Centers for Medicare and Medicaid Services (CMS) recently released best practice model recommendations to assist with supporting students with mental health and substance use disorder related needs in schools (McCance-Katz & Lynch, 2019).

Mental health, substance use, and other types of services in schools can be structured into Multi-tiered Systems of Supports (MTSS): overarching support systems with multiple tiers that reach students based on their academic, medical and behavioral health needs (McCance-Katz & Lynch, 2019). The tiered structure follows the seminal classification levels of prevention identified by the Institute of Medicine (Haggerty & Mrazek, 1994) with universal (tier 1), early intervention and

targeted support (tier 2), and identified services for students experiencing mental or substance use related health disorders in school settings (tier 3).

Like MTSSs, Comprehensive School Mental Health Systems (CSMHS) are also tier-based, however they focus on training of school personnel, and facilitation of school-community collaborations that help provide access and referral to mental health and substance use services for different levels within and across school systems (Connors et al., 2016).

Key Features and Benefits:

Multi-Tiered Systems of Supports (MTTS)

- MTSSs are data-driven, prevention-based, and designed to serve the whole school.
- Tier 1 services include widespread screening for disorders and their risk factors in students, prevention-based curricula and activities (e.g., social-emotional learning), and a focus on a positive school environment.
- Tier 2 services are more direct, including implementation of group interventions, more concentrated screening for disorders, and a focus on resolution and resilience.
- Tier 3 involves treatment and recovery services at the family or caregiver level for identified behavioral conditions.

Comprehensive School Mental Health Systems (CSMHS)

- CSMHSs include evidence-based universal prevention efforts in the form of training personnel to identify and respond to mental health difficulties as they present early on in students. CSMHSs also function by employing targeted prevention and intervention programs.
- Schools that host CSMHSs develop community collaborations with local law enforcement, health care providers, treatment providers, businesses, and faith communities.
- Employing CSMHS-based trainings have aided schools in improving their school climate, safety, and students' coping and resiliency skills (Haggerty et al., 2018).

Considerations for Implementation:

- Costs for implementing comprehensive school-based behavioral health systems vary due to the range of student needs and may require multiple streams of funding. Federal grants exist to aid in the development of these health systems (e.g., Project AWARE; SAMHSA 2018).
- No-cost planning tools such as the School Health Assessment and Performance Evaluation system (University of Maryland, 2019) can help schools to plan for implementation and create capacity for comprehensive systems.
- The National Advisory Committee on Rural Health and Human Services recommends the use of telehealth (e.g., video conferencing, internet, and other wireless communications) to increase access and aid the integration of behavioral health care services, especially for rural communities (Belanger et al., 2018).

School-Based Prevention Strategies

What is it?

Schools are considered an ideal setting for the implementation of mental health and substance use prevention programming and strategies (Doll & Cummings, 2008). The school infrastructure allows for access to individuals at ages when early prevention efforts are most effective. However, schools are dedicated primarily to providing educational services and typically lack the capacity needed for implementation of mental health or substance use disorder prevention efforts (O'Connell, Boat, & Warner, 2009). The key features and benefits outlined in this section provide guidance on the primary areas to consider when selecting school-based prevention strategies, in order to maximize efficiency and minimize the burden on schools.

Key Features and Benefits:

Mental Health Literacy Education. Raising awareness and literacy around mental health issues is a universal prevention strategy to equip staff and students with the ability to identify warning signs for disorders and orient them to possible solutions in crisis situations (McCance-Katz & Lynch, 2019). Mental health literacy involves multiple constructs related to health and generally is defined as knowledge about mental health disorders that is associated with their recognition, management, and prevention (Jorm et al., 1997), and knowledge of the stigma surrounding mental health and substance use disorders (Kutcher, Wei, & Coniglio, 2016).

- Help-seeking behaviors among individuals experiencing mental health issues include perceiving the need for help, evaluating the costs and benefits of seeking help or engaging in treatment, and then taking action to receive help (Eisenberg, Downs, Golberstein, & Zivin, 2009). However, barriers such as stigma and lack of knowledge about disorders and where to seek help can impede help-seeking behavior (Eisenberg et al., 2009; Furnham & Swami, 2018). Building mental health literacy increases help-seeking intentions which can facilitate staff and students to access existing mental health services (McCance-Katz & Lynch, 2019).
- Mental health literacy is recognized as an effective component for improving health outcomes at both individual and community levels (WHO, 2016).
- Literacy training programs are widely available and highly adaptable for integration into curricula and for serving specific populations within school settings (e.g., specific student groups, staff, administration; Kelly, Jorm, & Wright, 2007).

Social and Emotional Learning. Social and emotional learning (SEL) is a process of acquiring developmental competencies to manage emotions, set and achieve goals, take the perspective of others, and maintain positive social relationships (Durlak et al., 2011). School-based mental health and substance use prevention/treatment strategies, policies, and programming should be implemented that incorporate SEL in their development (e.g., theoretical foundations) or practical application (e.g., staff training, curricula).

- Approaches that integrate SEL have been associated with reduced behavior problems, positive school environments, and academic achievement (Durlak et al., 2011).
- SEL components can be tailored to support the acquisition of specific behavioral- and substance-related adaptive skills (e.g., alcohol or drug refusal skills, avoiding violence,

reducing risky sexual behavior), or they may be applied to general positive self-esteem promotion (Sklad et al., 2012).

- SEL-based prevention strategies can be used to increase protective factors as well as be used as interventions when ongoing disorders have been identified in schools (Catalano et al., 2002). Thus, concentrating on SEL skills can support multiple service tiers.
- Integrating SEL concepts into schools also contributes to a positive school climate, which can facilitate more effective teaching, and a safe learning environment (Lewallen et al., 2015).

Family Engagement. A way to focus on the mental and behavioral health of the “whole child” is through shared responsibility of school staff and families. Families should be encouraged to engage with schools in positive and meaningful ways, such as through parent communication, home-based learning activities, parental volunteering, staff and parent interactions, and shared decision-making regarding their students' mental health and substance use concerns (Epstein, 2010; Lewallen et al., 2015).

- Family engagement supports and improves students' socio-emotional learning and academic outcomes (Emerson, Fear, Fox, & Sanders, 2012).
- Family engagement facilitates continuous positive academic and health outcomes, and avoidance of risk behaviors throughout students' education (Borgonovi & Montt, 2012).
- Engaging families to be connected to the school environment affects student health in other settings as well including the home, after school programs, and in the larger community (Lewallen et al., 2015).

Considerations for Implementation:

- Schools need not do all the heavy lifting. Forming collaborations with community partners from multiple sectors, such as national after school programs (e.g., Boys and Girls Clubs of America, YMCA), local businesses, and colleges and universities, can enhance schools' capacity for implementing prevention strategies (McCance-Katz & Lynch, 2019).
- Teachers should be encouraged to be facilitators of prevention interventions, while ensuring a balance between maintaining fidelity in implementation of interventions and preserving resources devoted to providing academic/educational services (Sklad et al., 2012).
- Considerations should be made to ensure that families from all cultures, socio-economic statuses, and disadvantaged backgrounds are being engaged. Families may experience barriers to engagement in services as a result of differing social classes, family structures, primary languages, and cultural norms (Kim, 2009).

School Substance Use Policies

What is it?

The implementation of consistent and effective policies in schools and districts to address substance use has been shown to be directly related to lower rates of student substance use (Flay, 2000; Evans-Whipp, Bond, Toumbourou, & Catalano, 2007). Examples of substance use policies in school settings include abstinence promotion, harm-reduction messaging, and "safe harbor" policies which eschew disciplinary actions for violations in favor of counseling, supervision, and

required participation in education or counseling programs (United Educators, 2014; Evans-Whipp et al., 2004). Though school substance use policies are an important part of school-based prevention, school administrators are typically provided little guidance when selecting which policies to implement, or what policy elements are most effective (Ringwalt et al., 2008).

Key Features and Benefits:

- Effective and well implemented school substance use policies reach large numbers of students and the associated costs of maintaining policies can be minimal compared to implementing programmatic interventions (Evans-Whipp et al., 2004).
- Schools that create and maintain their own policies regarding substance use can influence the social environment of a school by setting norms and establishing behavior guidelines (Goodstadt, 1989). Policies contribute to a school's social climate and the quality of student connectiveness (Cohen, McCabe, Micheli, & Pickeral, 2009), which are predictors of adolescent health outcomes (Catalano, Oesterle, Fleming, & Hawkins, 2004).
- School policies can support and be supported by local community norms, expectations, and laws regarding substance use and punishment for violations (Flay, 2000).

Considerations for Implementation (Sloboda, 2009):

- Policies should aim to reduce or eliminate access to and availability of tobacco, alcohol, or other drugs and should explicitly specify the substances that are targeted.
- Policies should consider the range of substance-use behavior from initiation to progression to use and dependence and relapse and be contextually appropriate for students of different ages/grades.
- Efforts should be taken to adequately inform parents of school substance use policy.
- Policies should not disrupt normal school functioning.
- The student body, faculty, and students should be involved in developing the policy.
- Policies should provide systematic training for policy administrators and educate the target population about participation in policy aims.
- Infractions of policies should be met with positive sanctions by providing counseling or treatment and special services to the students rather than punishing them through suspension or expulsion. Similarly, policies should provide positive reinforcement for policy compliance. Exclusionary policies (e.g., suspension, expulsion) have been found to be associated with negative consequences and increased substance-use problems for excluded students (Bond et al., 2007).

School Support Personnel

What is it?

Teachers are positioned to have unique insight into the mental and behavioral health needs of the students they interact with given the amount of time they spend and the relationships they build with students. However, teachers also report that they do not receive adequate training, consultation, and coaching to identify need and/or implement mental and behavioral health practices (Reinke et al., 2011). As an addition to regular school staff, SAMHSA recommends

appointing specific key personnel to help support the mental health and well-being of students (McCance-Katz & Lynch, 2019).

Key Features and Benefits:

School Resources Officers. A school resource officer (SRO) is a sworn career law enforcement officer, employed by a police department, who is trained and assigned to collaborate with one or more schools (NASRO, 2019). The National Association of School Resource Officers (2019) recognizes three primary roles of SROs: guest lecturer, informal counselor or mentor, and law enforcement officer.

- A highly trained SRO can help identify students with mental health or substance use disorders and connect them with services in the school and/or community.
- SROs can contribute to a safe and supportive school climate (McCance-Katz & Lynch, 2019).
- SROs facilitate positive connections for students in their intersections between family, school, and community ecological domains. More specifically, SROs can help schools coordinate with law enforcement community crisis teams.

Counseling, Psychological, and Social Services (CPSS) Coordinators. CPSS coordinators are staff, typically school-based counselors, psychologists, social workers, and/or nurses, who manage and synchronize the delivery of mental health and substance use services for students within and outside of schools (Brenner & Demissie, 2018; Cowan, Vaillancourt, Rossen, & Pollitt, 2013). These coordinators ensure that students' health needs are being met through utilization of school-based services or by linking them to available services in the community (Taras, 2004).

- Coordination of services can help to refine the mission, goals and directives of policies and programs (Brenner & Demissie, 2018).
- CPSS coordinators facilitate students' access to the full range of available services as well as enhance school-community partnerships (Cowan, Vaillancourt, Rossen, & Pollitt, 2013).

Behavioral Health Aides and Peer Supporters. Enlisting support from trained behavioral health aides, school-based social workers, and peer supporters has been found to improve student health, engagement, and reduce the costs of services to schools by supplementing existing services (Obrochta et al., 2011).

- Support from behavioral health aides in schools can help to reduce burden on teachers, administrators, and mental health contractors, as well as provide additional connections to community services for students and their families (Hoagwood et al., 2010).
- Peer support models benefit students through connection and education from individuals similar to them who have lived experience with mental health or substance use issues (Solomon, 2004).
- Peer support promotes mechanisms of social and emotional learning, such as respect and trust, and empowerment to pursue goals (Miyamoto & Sono, 2012).

Considerations for Implementation:

- Special attention should be paid to ensure support staff, in particular SROs (NASRO, 2015), have training in behavioral management, child development, communication skills, and awareness of student disabilities or vulnerabilities (Arroyo, Rhoad, & Drew, 1999). Certification by national or professional agencies is recommended (Arroyo, Rhoad, & Drew, 1999).
- Additionally, the role of SROs should not supplant the formal responsibilities of school administrators and educators in the discipline matters of students (NASRO, 2015).
- The ratio of staff to students should be considered to ensure adequate coverage of services and reduce burden on staff. The American School Counselors Association recommends a counselor-to-student ratio of 1:250 (Bowers & Hatch, 2005). Depending on the type of support staff a school is considering, most are governed by professional organizations that publish ratio recommendations.
- The contexts of students' cultures and social backgrounds, school climate, and mental health and substance use risks and needs should be taken into consideration when selecting support staff and services (Loukas & Robinson, 2004).

Special Considerations

Attention-Deficit/Hyperactivity Disorder (ADHD)

ADHD is the most common psychiatric diagnosis for school-aged children and can greatly affect the academic achievement, well-being, and social interactions of students (Furman, 2005; Wolraich et al., 2011). Behavioral manifestations of ADHD in students can include hyperactivity, impulsivity and inattention, which in the classroom can be disruptive or translate into delinquency (Langberg et al., 2008). Given the normative developmental changes occurring in students of these ages, and the increases in social, cognitive, and contextual demands (e.g., school schedules, homework deadlines, etc.), ADHD deserves special attention on the subject of the mental health and well-being of students. One of the diagnostic criteria for ADHD is consistent difficulty in both the home and school settings (DuPaul & Jimerson, 2014; AAP, 2011). School personnel, parents, and clinicians have fundamentally different relationships to a student, yet all have significant influence on the life of a student with ADHD (Frigerio, Montali, & Fine, 2013).

References

- American Academy of Pediatrics, Subcommittee on Attention-Deficit/Hyperactivity Disorder, Steering Committee on Quality Improvement and Management [AAP]. (2011). ADHD: clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*, 128(5):1007–1022.
- Arroyo, A. A., Rhoad, R., & Drew, P. (1999). Meeting diverse student needs in urban schools: Research-based recommendations for school personnel. *Preventing School Failure: Alternative Education for Children and Youth*, 43(4), 145-153.
- Belanger, K., Benson, W., Borders, T., Dalton, K., Emanuel-McClain, C., Evans, K., ... & Greer, C. (2018). Exploring the Rural Context for Adverse Childhood Experiences (ACEs) Policy Brief and Recommendations. National Advisory Committee on Rural Health and Human Services. Retrieved from: <https://files.eric.ed.gov/fulltext/ED591840.pdf>
- Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health*, 40(4), 357-e9.
- Borgonovi, F., & Montt, G. (2012). Parental involvement in selected PISA countries and economies. OECD Education Working Papers, No. 73. Paris: Organization for Economic Co-operation and Development.
- Bowers, J., & Hatch, P. A. (2005). *The ASCA national model: A framework for school counseling programs*. American School Counselor Association, 1101 King Street, Suite 625, Alexandria, VA 22314.
- Brener, N. B., & Demissie, Z. (2018). Counseling, Psychological, and Social Services Staffing: Policies in U.S. School Districts. *American Journal of Preventive Medicine*, 54(6), S215-S219.
- Bruckner, T. A., Domina, T., Hwang, J. K., Gerlinger, J., Carpenter, C., & Wakefield, S. (2014). State-level education standards for substance use prevention programs in schools: a systematic content analysis. *Journal of Adolescent Health*, 54(4), 467-473.
- Catalano, R. F., Hawkins, J. D., Berglund, M. L., Pollard, J. A., & Arthur, M. W. (2002). Prevention science and positive youth development: competitive or cooperative frameworks? *Journal of Adolescent Health*, 31(6), 230-239.
- Catalano, R. F., Oesterle, S., Fleming, C. B., & Hawkins, J. D. (2004). The importance of bonding to school for healthy development: Findings from the Social Development Research Group. *Journal of School Health*, 74(7), 252-261.
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180-213.
- Connors, E. H., Stephan, S. H., Lever, N., Ereshefsky, S., Mosby, A., & Bohnenkamp, J. (2016). A national initiative to advance school mental health performance measurement in the US. *Advances in School Mental Health Promotion*, 9(1), 50-69.
- Cowan, K. C., Vaillancourt, K., Rossen, E., & Pollitt, K. (2013). A framework for safe and successful schools [Brief]. Bethesda, MD: National Association of School Psychologists. Retrieved from: www.nasponline.org/Documents/Research%20and%20Policy/Advocacy%20Resources/Framework_for_Safe_and_Successful_School_Environments.pdf.
- Doll B, Cummings J. Why population-based services are essential for school mental health, and how to make them happen in your school. In: Doll B, Cummings J, editors. Transforming school mental health services: Population-based approaches to promoting the competency and wellness of children. Thousand Oaks, CA: Corwin Press; 2008
- DuPaul, G. J., & Jimerson, S. R. (2014). Assessing, understanding, and supporting students with ADHD at school: Contemporary science, practice, and policy.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development*, 82(1), 405-432.
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review*, 66(5), 522-541.

- Emerson, L., Fear, J., Fox, S., & Sanders, E. (2012). Parental engagement in learning and schooling: Lessons from research. *A report by the Australian Research Alliance for Children and Youth (ARACY) for the Family-School and Community Partnerships Bureau: Canberra.*
- Epstein, J. L. (2010). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan*, 92(3), 81-96.
- Essler, V., Arthur, A., & Stickley, T. (2006). Using a school-based intervention to challenge stigmatizing attitudes and promote mental health in teenagers. *Journal of Mental Health*, 15(2), 243-250.
- Evans-Whipp, T., Beyers, J. M., Lloyd, S., Lafazia, A. N., Toumbourou, J. W., Arthur, M. W., & Catalano, R. F. (2004). A review of school drug policies and their impact on youth substance use. *Health Promotion International*, 19(2), 227-234.
- Evans-Whipp, T. J., Bond, L., Toumbourou, J. W., & Catalano, R. F. (2007). School, parent, and student perspectives of school drug policies. *Journal of School Health*, 77(3), 138-146.
- Flay, B. R. (2000). Approaches to substance use prevention utilizing school curriculum plus social environment change. *Addictive Behaviors*, 25(6), 861-885.
- Frigerio, A., Montali, L., & Fine, M. (2013). Attention deficit/hyperactivity disorder blame game: A study on the positioning of professionals, teachers and parents. *Health*, 17(6), 584-604.
- Furman, L. (2005). What is attention-deficit hyperactivity disorder (ADHD)? *Journal of Child Neurology*, 20(12), 994-1002.
- Furnham, A., & Swami, V. (2018). Mental health literacy: A review of what it is and why it matters. *International Perspectives in Psychology: Research, Practice, Consultation*, 7(4), 240.
- Goodstadt, Michael S. "Substance abuse curricula vs. school drug policies." *Journal of School Health* 59, no. 6 (1989): 246-250.
- Haggerty, D., Carlson, J.S., McNall, M., Lee, K.S., & Williams, S. (2018). Exploring youth mental health first aider training outcomes by workforce affiliation: A survey of Project AWARE participants. *School Mental Health*, 5(3), 1-12.
- Haggerty, R. J., & Mrazek, P. J. (Eds.). (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. National Academies Press.
- Hoagwood, K. E., Cavaleri, M. A., Olin, S. S., Burns, B. J., Slaton, E., Gruttadaro, D., & Hughes, R. (2010). Family support in children's mental health: A review and synthesis. *Clinical Child and Family Psychology Review*, 13(1), 1-45.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). "Mental health literacy": a survey of the public's ability to recognize mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166(4), 182-186.
- Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Medical Journal of Australia*, 187(S7), S26-S30.
- Kim, Y. (2009). Minority parental involvement and school barriers: Moving the focus away from deficiencies of parents. *Educational Research Review*, 4(2), 80-102.
- Kutcher, S., Wei, Y., & Coniglio, C. (2016). Mental health literacy: past, present, and future. *The Canadian Journal of Psychiatry*, 61(3), 154-158.
- Langberg, J. M., Epstein, J. N., Altaye, M., Molina, B. S., Arnold, L. E., & Vitiello, B. (2008). The transition to middle school is associated with changes in the developmental trajectory of ADHD symptomatology in young adolescents with ADHD. *Journal of Clinical Child & Adolescent Psychology*, 37(3), 651-663.
- Lewallen, T. C., Hunt, H., Potts-Datema, W., Zaza, S., & Giles, W. (2015). The whole school, whole community, whole child model: A new approach for improving educational attainment and healthy development for students. *Journal of School Health*, 85(11), 729-739.
- Loukas, A., & Robinson, S. (2004). Examining the moderating role of perceived school climate in early adolescent adjustment. *Journal of Research on Adolescence*, 14(2), 209-233.
- McCance-Katz, E., Lynch, C. (2019). Guidance to states and school systems on addressing mental health and substance use issues in schools (Joint SAMHSA and CMS Informational Bulletin). Retrieved from: https://store.samhsa.gov/system/files/joint_info_bulletin_school_based_services_final_508_6.28.19.pdf

Miyamoto, Y., & Sono, T. (2012). Lessons from peer support among individuals with mental health difficulties: a review of the literature. *Clinical Practice and Epidemiology in Mental Health: CP & EMH*, 8, 22.

National Association of School Resource Officers [NASRO]. (2019). Frequently Asked Questions. Retrieved from: <https://nasro.org/frequently-asked-questions/>

National Association of School Resource Officers [NASRO]. 2015. NASRO position statement on police involvement in student discipline. Retrieved from: <https://nasro.org/news/press-releases/nasro-position-statement-police-involvement-student-discipline/>

National Research Council. (2002). *Community programs to promote youth development*. Washington, DC: National Academies Press.

National Research Council. (2009). Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. Washington, DC: National Academies Press.

Obrochta, C., Anthony, B., Armstrong, M., Kallal, J., Hust, J., & Kernan, J. (2011). *Family-to-family peer support: Models and evaluation* (Issue Brief). Atlanta, GA: ICF Macro, Outcomes Roundtable for Children and Families. Retrieved from: http://www.fredla.org/wp-content/uploads/2016/01/Issue-Brief_F2FPS.pdf.

O'Connell, M. E., Boat, T., & Warner, K. E. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities* (Vol. 7). Washington, DC: National Academies Press.

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly*, 26(1), 1.

Richardson, J. W., & Juszczak, L. J. (2008). Schools as sites for health-care delivery. *Public Health Report*, 123(6), 692-694.

Ringwalt, C., Hanley, S., Vincus, A. A., Ennett, S. T., Rohrbach, L. A., & Bowling, J. M. (2008). The prevalence of effective substance use prevention curricula in the nation's high schools. *The Journal of Primary Prevention*, 29(6), 479-488.

Seitz, C. M., Wyrick, D. L., Orsini, M. M., Milroy, J. J., & Fearnow-Kenney, M. (2013). Coverage of Adolescent Substance Use Prevention in State Frameworks for Health Education: 10-Year Follow-Up. *Journal of School Health*, 83(1), 53-60.

Singh, I. (2006). A framework for understanding trends in ADHD diagnoses and stimulant drug treatment: schools and schooling as a case study. *BioSocieties*, 1(4), 439-452.

Sklad, M., Diekstra, R., Ritter, M. D., Ben, J., & Gravesteyn, C. (2012). Effectiveness of school-based universal social, emotional, and behavioral programs: Do they enhance students' development in the area of skill, behavior, and adjustment? *Psychology in the Schools*, 49(9), 892-909.

Sloboda, Z. (2009). School prevention. In *Adolescent Substance Abuse* (pp. 191-212). Springer, Boston, MA.

Solomon, P. (2004). Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal*, 27(4), 392.

Substance Abuse and Mental Health Services Administration [SAMHSA]. (2018). Project AWARE (Advancing Wellness and Resiliency in Education) State Education Agency Grants. Retrieved from: <https://www.samhsa.gov/grants/grant-announcements/sm-19-003>.

Taras, H. L. (2004). School-based mental health services. *Pediatrics*, 113(6), 1839-1845.

Trach, J., Lee, M., & Hymel, S. (2018). A social-ecological approach to addressing emotional and behavioral problems in schools: Focusing on group processes and social dynamics. *Journal of Emotional and Behavioral Disorders*, 26(1), 11-20.

United Educators. (2014). Public School Policies: Keeping Students Drug and Alcohol Free. Retrieved from: <https://www.ue.org/uploadedFiles/Keeping%20Students%20Alcohol%20and%20Drug%20Free%20PS.pdf>

University of Maryland. (2019). School Health Assessment and Performance Evaluation [SHAPE]. Retrieved from <https://theshapesystem.com/>

World Health Organization. [WHO]. (2013). *Health literacy: the solid facts*. Geneva (CH): WHO Regional Office for Europe

Wolraich, M., Brown, L., Brown, R. T., DuPaul, G., Earls, M., Feldman, H. M., & Visser, S. (2011). Subcommittee on Attention-Deficit/Hyperactivity Disorder; Steering Committee on Quality Improvement and Management. ADHD: clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*, 128(5), 1007-1022.

Best Practices for Treating Mental Health and Substance Use Disorders in College and Universities

For most young people who enroll in college, it is their first time away from home and away from the support of their established peer groups and family members (Fromme, Corbin, & Kruse, 2008). This adjustment can be overwhelming, as is the added full college course schedule and expectations to perform (Macan, Shahani, Dipboye, & Phillips, 1990). On top of that, individuals at this age are in a stage of development when they are introduced to often difficult realities of adult responsibilities (Arnett, 2000). Their cognitive and emotional capacities may be tested in confronting newly complex personal and social issues (Arnett, 2000). And some level of experimentation with risk behaviors becomes normative (Fromme, Corbin, & Kruse, 2008). Relatedly, the age at which most young people are in higher education is also the age of peak onset for mental health and substance use disorders (Kessler et al., 2007). Although these risks for students of traditional college-age are high, the college/university is also a setting in which there is typically access to treatment for mental health disorders, and the prospect for establishing life-long health promotion practices. Thus, college and university settings provide unique opportunity for prevention and early intervention efforts.

Guiding Best Practices

Establishing a Comprehensive Public Health Approach to Mental Health

What is it?

Establishing a comprehensive public health approach is the ideal way to adequately address the mental health and substance use needs of a diverse student body (Davidson & Locke, 2010). A public health approach focuses on communities and societies as the recipients of services, rather than any one individual (Doll and Cummings, 2008). College students who are at high risk or are experiencing health consequences typically belong to risk groups (e.g., first-year, Greek affiliated, athletes) and are driven by group or community norms for behavior (Perkins, 2002), thus public prevention and treatment benefit not just them but the campus community at large (Parcover, Mays, & McCarthy, 2015). Public health approaches on campuses also seek to engage the integration of academics, athletics, campus health and other services whose efforts may be less effective alone (Mowbray et al., 2006). In addition to linking services across campus settings, a public health approach includes a continuum of services that address multiple levels of influence in a student's college life including interpersonal, institutional, and community influences (Dejong & Langford, 2002; National Research Council, 2009).

Key Features and Benefits:

- Comprehensive and public health approaches to addressing mental health and substance use disorders implement programs and policies along a spectrum of primary prevention, health promotion, treatment, maintenance, and crisis response (Haggerty & Mrazek, 1994).

- According to Davidson, & Locke (2010), a comprehensive public health approach that targets risk factors and focuses on prevention and early intervention reduces the demand for intensive, resource-consuming clinical services (e.g., emergency or after-hours).
- Many students in need of psychological or substance use-related services do not seek counseling (Yorgason, Linville, & Zitzman, 2008). By transitioning from reactive, in-center services to a pro-active population-based public health approach, this major barrier to accessing services can be mitigated (Kirsch et al., 2014; Parcover, Mays, & McCarthy, 2015).

Considerations for Implementation:

- Comprehensive public health models require assessments of needs and resources, identification of risk and protective factors that determine health outcomes, and the promotion and dissemination of information regarding the importance of healthy behaviors and the identification of warning signs for risk behaviors (Miles et al., 2010).
- Transitioning to a public health model for mental health and substance use disorder services requires staff buy-in (Kitzrow, 2003; Yearwood & Riley, 2010). Enlisting support from administrators, colleagues, students, and staff from different college departments facilitates planning processes (Parcover, Mays, & McCarthy, 2015).
- Campus behavior norms are not static (Perkins, 2002), and require continual assessment to identify the needs of the student population. Services should not wait for students to come to them but be proactive in their support of campus health (Parcover, Mays, & McCarthy, 2015). This includes regular campus wide needs assessments, advertisement of services, and the enlistment of campus community leaders as health champions.
- Mentors and faculty advisors are positioned to be resourceful intermediaries between students and administrators and should establish regular appointments (e.g., quarterly/semesterly meetings) that address mental health and substance use issues on campus (SAMHSA, 2007).
- To facilitate better integration of multiple campus entities in delivering mental health or substance use services, a “no wrong door policy” should be adopted so that students who seek services, be it directly through mental health services or through mentors or faculty advisors, should receive assessments and referral to appropriate treatments (Mowbray et al., 2006).

Campus-Based Prevention Strategies

What is it?

Like elementary and high school students, college students are in an ideal position to receive substance use disorder prevention interventions as a result of being in the school environment. College students and communities have abundant access to prevention interventions as they are commonly developed and tested on campuses. Furthermore, colleges or academic departments are frequent recipients of grant funding to develop such interventions. However, the interventions and strategies tested are not always formally integrated into campus policies and not all interventions are successful (Scott-Sheldon et al., 2014). The following are key considerations when implementing prevention strategies on college campuses.

Key Features and Benefits:

Environmental strategies. Environmental substance use prevention strategies function on the premise that substance use problems are driven by physical, social, economic and legal aspects of a student's environment (DeJong et al., 1998). Specific strategies that fall under this approach include creating environments that offer substance-free recreational or social alternatives, limiting the availability of substances, prohibiting advertisement of substance on campus, and enforcing anti-substance policies (Zimmerman & DeJong, 2003). Environmental approaches also involve collaboration and concerted efforts with the local community surrounding a college campus (DeJong et al., 1998). Strengthening partnerships and communication regarding restrictions on locations and density of alcohol stores around campus, responsible vendor practices, and other policies is integral to prevention efforts and benefits the college and surrounding community reciprocally (Vicary & Karshin, 2002).

Social norms. Another aspect of a college student's environment is the perceived culture of normative behaviors that college students engage in (Bandura, 2002). Traditionally, the college experience has been paired with a normative expectation to use substances, namely alcohol (NIAAA, 2002). This expectation is reinforced through normative beliefs (Perkins, 2002; Perkins, Haines, & Rice, 2005), as most college students engage in behavior they perceive other students similar to them do, even if those perceptions are inaccurate (Berkowitz, 2005). However, norms for engaging in risk behaviors such as drinking, as well as norms for engaging in health behaviors, have consistently been found to be malleable in the college setting (Haines, Perkins, & Rice, 2005). Normative elements that inform students of positive behaviors their peers do, or consider to be acceptable, can be included in the development and implementation of multiple types of prevention strategies for behavioral health (e.g., normative messaging campaigns, behavior modeling, and assessment) (Haines et al., 2005; Lewis & Neighbors, 2006).

Faculty involvement. College teaching and instruction are not limited to just the classroom environment and faculty can have awareness of and influence on student's behavioral health issues (Perron et al., 2011). Faculty-student interactions have been found to positively affect students' physical, emotional, and academic well-being (Sax, Bryant, & Harper, 2005). While there is continual turnover among students and administrators, college faculty remain longer and can provide continuity and stability to prevention efforts (Ryan & Dejong, 1998). A specific form of faculty interaction is curriculum infusion, where faculty work with student affairs professionals to integrate information and education about health topics into the regular curriculum of courses offered to students (Jones & Sanford, 2003), much like how contemporary examples of academic topics are featured in course content. Curriculum infusion has been found to be an effective strategy in the promotion of mental health (e.g., Mitchell et al., 2012) and prevention of problem alcohol and drug use (e.g., Lederman, Stewart, & Russ, 2007; Cordero, Israel, White, & Park, 2010).

Student involvement. The participation of students, student-led organizations, and student leadership in the planning and implementation of mental health and substance use prevention strategies is essential to their success (Battistich & Hom, 1997; Vicary & Karshin, 2002). Students offer unique insight into campus culture and health needs, and can be a valuable resource for strategy implementation (e.g., peer educators and program facilitators, and community champions for initiatives) (DiRamio & Payne, 2007). Enlisting the involvement of student groups and organizations can also provide avenues to intervene in specific high-risk subgroups of the campus

population (e.g., Greek-affiliated groups, athletes, first year students) (Moynihan & Baynard, 2008; Borsari & Carey, 2001).

Considerations for Implementation:

- Prevention efforts should focus on universal screening of incoming students for mental health risks and risky substance use behaviors (NIAAA, 2002).
- The use of computerized screening or computerized interventions can significantly reduce costs and other burdens on staff and students (Scott-Sheldon et al., 2014).
- Prevention strategies should have clear goals, and the core principles and mechanisms of interventions should be identified (Vicary & Karshin, 2002).
- Substance use prevention programs or strategies that heavily rely on abstinence or knowledge acquisition about risks alone should be avoided as these approaches have been found to be largely unrelated to behavior change (Vicary & Karshin, 2002).
- Though the college experience is geared towards supporting the autonomy of students (Arnett, 2000), parents continue to have lasting influences on their children's health and behaviors, and their involvement improves substance use and mental health programming effectiveness (Kuntsche & Kuntsche, 2016).
- The timing of delivery of prevention interventions should reflect periods when students are more likely to engage in substance use (e.g., spring breaks, holidays) (Del Boca, Darkes, Greenbaum, & Goldman, 2004).

Campus Substance Use Policies

What is it?

The primary substance related concern on college campuses is excessive drinking, followed by marijuana use, and recently an increased misuse of prescription medications (SAMHSA, 2019). As a response, college campuses' primary method of addressing substance use and avoiding health consequences among the student body has traditionally been campus substance use policies (Hirschfeld, Edwardson & McGovern, 2005). Campus substance use policies have been found to be effective in reducing substance use, especially alcohol use (Toomey & Wagenaar, 2002). Campus substance use policies are typically formal documentation of the university's position on alcohol, tobacco and other drug use that may consider local laws, the campus culture, values, and common-sense principles (Larimer & Cronce, 2002). Policies may include individual sanctions for substance use violations, adoption of harm reduction approaches, and/or use of environmental mechanisms such as restriction of on-campus advertisement of alcohol promotions and party announcements that allude to alcohol or drug use (Wechsler & Nelson, 2008).

Key Features and Benefits:

- Campus substance use policies reflect a college's academic reputation to prospective students and their parents (Turrisi et al., 2001).
- Policies convey personal responsibility messages to students about using substances, which can contribute to the establishment of personal and social developmental competencies (Schulenberg & Maggs, 2002).

- The mandates of policies can facilitate broader campus-based substance use prevention by complementing other efforts such as existing campus services and planned interventions for addressing substance use problems (e.g., referral to services as a positive sanction).

Considerations for Implementation:

- Alcohol and other drug policies must be specific and detailed so that students, faculty, and other staff will understand precisely what is expected of them (SAMHSA, 2019). Policies should be as transparent and prominent as possible. More discretion translates into greater responsibility on the student to behave according to their personal code rather than that of the institution (Hirschfeld, Edwardson, & McGovern, 2005).
- Policies should focus on health and safety versus authoritarian control (Hirschfeld, Edwardson, & McGovern, 2005).
- In order to circumvent policies students may engage in higher risk behaviors, for example drinking greater amounts of alcohol in a shorter amount of time to conceal use (Kilmer et al., 1999). Regular evaluation of policies is vital to ensure that a policy does not cause unintentional repercussions (Larimer, Kilmer, & Lee, 2005).
- The process of creating policy should involve multiple campus stakeholders in order to reflect actual campus norms and needs (DeJong & Langenbahn, 1995). Stakeholders include students and student organizations, faculty, administrators, and services staff. Policies should be adaptable as campus characteristics and needs change (Hirschfeld, Edwardson, & McGovern, 2005).
- The availability of substances to college students is increased with the addition of more free time (Porter & Pryor, 2007). Implementing college course-level policies that do not allow for late attendance, absences, and/or long weekends can interrupt the cycle in which free time contributes to increased use, in turn leading to declines in class attendance, studying, and overall academic performance (Ligorski et al., 2010).
- Campus-wide bans on alcohol use should be considered with care as they often face staunch opposition by both underage and legal-drinking age students (SAMHSA 2019). Instead, more nuanced approaches such as creating alcohol-free environments, residences, and social functions may be preferable (DeJong et al., 2007).

Special Considerations

The Transition to College

Research consistently shows that the key risk periods for problematic drug use are during major transitions in the lifespan (Jordan & Andersen, 2017). New students and their families often consider college as a new beginning and assume that past psychological or behavioral problems will disappear (Mowbray et al., 2006), however a great deal of mental health and substance related injuries occur in the first year of college enrollment, and particularly during the first few weeks of the year (Fromme, Corbin, & Kruse, 2008). College faculty and administration, and parents can take measures to reduce negative health outcomes during this period of high risk (e.g., Bruffaerts et al., 2018; Wood, Read, Mitchell, & Brand, 2004). College students and their families with histories of serious mental health problems should be well-educated about early warning signs or symptoms and knowledgeable about campus-based mental health services and how to access them (Young & Calloway, 2015). Freshman orientation activities should include components to

educate students and parents on the health care system available to them and how to navigate it (Rosen et al., 2003). In addition to college-delivered mental health services, efforts should be made by the college to promote and provide clear instructions on how students can access accommodations based on the Americans with Disabilities Act (Eckes & Ochoa, 2005). This guidance should be offered with consideration that students often are affected by stigma surrounding disability and behavioral health disorders and may be reluctant to access services (one approach is to emphasize confidentiality) (Mowbray et al., 2006).

Suicide Among College Students

Suicide is the second leading cause of death, after traffic accidents, among college students (Vastag, 2001; Davidson & Locke, 2010). The causes for suicide in the college setting are not entirely known but linkages have been found to factors such as personality traits of the student (e.g., perfectionism, competitiveness) (Hamilton & Schweitzer, 2000), academic pressures (Hawton et al., 2012), non-inclusive academic environments for minority students (Smith, Allen, & Danley, 2007), and interpersonal turmoil (Drum et al., 2009). Campuses vary widely in their policies, practices, and resources available to address the risk of suicide among students (Hunt & Eisenberg, 2010), and it can be difficult to identify the most effective strategies for campuses with different student populations, values, and cultures. A comprehensive campus plan is necessary to support student mental health crises and suicide risk (Belch, 2011). The most crucial component of a plan is identifying students who are at risk by screening for depression, substance use, or other issues on incoming medical history forms and integrating screening into disciplinary processes (The Jed Foundation, 2011). Faculty and staff should be knowledgeable of early warning signs for mental health crisis and suicide, the campus resources available, and how to refer students (Tompkins & Witt, 2009). Campuses should take advantage of national educational campaigns that target mental health stigma and address barriers to accessing services and distribute content through multiple modes (e.g., print media, web-based content, mobile technology) (Davidson & Locke, 2010).

References

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469.
- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology*, 51(2), 269-290.
- Battistich, V., & Hom, A. (1997). The relationship between students' sense of their school as a community and their involvement in problem behaviors. *American Journal of Public Health*, 87(12), 1997-2001.
- Belch, H. A. (2011). Understanding the experiences of students with psychiatric disabilities: A foundation for creating conditions of support and success. *New Directions for Student Services*, 134(1), 73-94.
- Berkowitz, A. D. (2005). An overview of the social norms approach. *Changing the culture of college drinking: A socially situated health communication campaign*, 193-214.
- Borsari, B., & Carey, K. B. (2001). Peer influences on college drinking: A review of the research. *Journal of Substance Abuse*, 13(4), 391-424.
- Bruffaerts, R., Mortier, P., Kiekens, G., Auerbach, R. P., Cuijpers, P., Demyttenaere, K., ... & Kessler, R. C. (2018). Mental health problems in college freshmen: Prevalence and academic functioning. *Journal of Affective Disorders*, 225, 97-103.
- Cordero, E. D., Israel, T., White, S., & Park, Y. S. (2010). Impact of instructor and course characteristics on the effectiveness of curriculum infusion. *Journal of American College Health*, 59(2), 75-81.
- Davidson, L., & Locke, J. H. (2010). 14 Using A Public Health Approach to Address Student Mental Health. In: Kay & Schwartz (Eds.) *Mental Health Care in the College Community*, (pp. 267-288). Hoboken, NJ: John Wiley & Sons Ltd.
- DeJong, W., Anderson, J., Colthurst, T., Davidson, L., Langford, L. M., Mackay-Smith, V. L., ... & Stubbs, H. (2007). Experiences in Effective Prevention: The US Department of Education's Alcohol and Other Drug Prevention Models on College Campuses Grants. *US Department of Education*.
- DeJong, W., & Langenbahn, S. (1995). Setting and Improving Policies for Reducing Alcohol and Other Drug Problems on Campus. A Guide for Administrators.
- DeJong, W., & Langford, L. M. (2002). A typology for campus-based alcohol prevention: moving toward environmental management strategies. *Journal of Studies on Alcohol, Supplement*, (14), 140-147.
- DeJong, W., Vince-Whitman, C., Colthurst, T., Cretella, M., Gilbreath, M., Rosati, M., & Zweig, K. (1998). Environmental Management: A Comprehensive Strategy for Reducing Alcohol and Other Drug Use on College Campuses.
- Del Boca, F. K., Darkes, J., Greenbaum, P. E., & Goldman, M. S. (2004). Up close and personal: Temporal variability in the drinking of individual college students during their first year. *Journal of Consulting and Clinical Psychology*, 72(2), 155.
- DiRamio, D., & Payne, R. (2007). Assessing the Relationship between Campus Programs, Student Self-Efficacy, Stress, and Substance Abuse. *College Student Journal*, 41(3).
- Doll B, Cummings J. Why population-based services are essential for school mental health, and how to make them happen in your school. In: Doll B, Cummings J, editors. *Transforming school mental health services: Population-based approaches to promoting the competency and wellness of children*. Thousand Oaks, CA: Corwin Press; 2008
- Drum, D. J., Brownson, C., Burton Denmark, A., & Smith, S. E. (2009). New data on the nature of suicidal crises in college students: Shifting the paradigm. *Professional Psychology: Research and Practice*, 40(3), 213.
- Eckes, S. E., & Ochoa, T. A. (2005). Students with disabilities: Transitioning from high school to higher education. *American Secondary Education*, 6-20.
- Fromme, K., Corbin, W. R., & Kruse, M. I. (2008). Behavioral risks during the transition from high school to college. *Developmental Psychology*, 44(5), 1497.
- Haggerty, R. J., & Mrazek, P. J. (Eds.). (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. National Academies Press.
- Haines, M. P., Perkins, H. W., Rice, R. M., & Barker, G. (2005). *A guide to marketing social norms for health promotion in schools and communities* (pp. 9-10). East Lansing, MI: National Social Norms Resource Center.

- Hamilton, T. K., & Schweitzer, R. D. (2000). The cost of being perfect: perfectionism and suicide ideation in university students. *Australian and New Zealand Journal of Psychiatry*, 34(5), 829-835.
- Hawton, K., Bergen, H., Mahadevan, S., Casey, D., & Simkin, S. (2012). Suicide and deliberate self-harm in Oxford University students over a 30-year period. *Social Psychiatry and Psychiatric Epidemiology*, 47(1), 43-51.
- Hirschfeld, L. M., Edwardson, K. L., & McGovern, M. P. (2005). A systematic analysis of college substance use policies. *Journal of American College Health*, 54(3), 169-176.
- Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health*, 46(1), 3-10.
- The Jed Foundation. 2011. A Guide to Campus Mental Health Action Planning. https://www.jedfoundation.org/CampusMHAP_Web_final.pdf
- Jones, T. S., & Sanford, R. (2003). Building the container: Curriculum infusion and classroom climate. *Conflict Resolution Quarterly*, 21(1), 115-130.
- Jordan, C. J., & Andersen, S. L. (2017). Sensitive periods of substance abuse: early risk for the transition to dependence. *Developmental Cognitive Neuroscience*, 25, 29-44.
- Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current Opinion in Psychiatry*, 20(4), 359.
- Kilmer, J. R., Larimer, M. E., Parks, G. A., Dimeff, L. A., & Marlatt, G. A. (1999). Liability management or risk management? Evaluation of a Greek System alcohol policy. *Psychology of Addictive Behaviors*, 13(4), 269.
- Kirsch, D. J., Pinder-Amaker, S. L., Morse, C., Ellison, M. L., Doerfler, L. A., & Riba, M. B. (2014). Population-based initiatives in college mental health: Students helping students to overcome obstacles. *Current Psychiatry Reports*, 16(12), 525.
- Kitzrow, M. A. (2003). The mental health needs of today's college students: Challenges and recommendations. *NASPA Journal*, 41(1), 167-181.
- Kuntsche, S., & Kuntsche, E. (2016). Parent-based interventions for preventing or reducing adolescent substance use—A systematic literature review. *Clinical Psychology Review*, 45, 89-101.
- Larimer, M. E., Kilmer, J. R., & Lee, C. M. (2005). College student drug prevention: A review of individually-oriented prevention strategies. *Journal of Drug Issues*, 35(2), 431-456.
- Lederman, L. C., Stewart, L. P., & Russ, T. L. (2007). Addressing college drinking through curriculum infusion: A study of the use of experience-based learning in the communication classroom. *Communication Education*, 56(4), 476-494.
- Lewis, M. A., & Neighbors, C. (2006). Social norms approaches using descriptive drinking norms education: A review of the research on personalized normative feedback. *Journal of American College Health*, 54(4), 213-218.
- Ligorski, C., McCullough, L., Orzech, S., & Skarud, M. (2010). Balancing Work and "Play": Power Struggles between Alcohol and Academics.
- Macan, T. H., Shahani, C., Dipboye, R. L., & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology*, 82(4), 760.
- Miles, J., Espiritu, R. C., Horen, N., Sebian, J., & Waetzig, E. (2010). A public health approach to children's mental health: A conceptual framework. Washington, DC: Georgetown University Center for Child and Human Development, National Technical Assistance Center for Children's Mental Health.
- Mitchell, S. L., Darrow, S. A., Haggerty, M., Neill, T., Carvalho, A., & Uschold, C. (2012). Curriculum infusion as college student mental health promotion strategy. *Journal of College Student Psychotherapy*, 26(1), 22-38.
- Mowbray, C. T., Mandiberg, J. M., Stein, C. H., Kopels, S., Curlin, C., Megivern, D., ... & Lett, R. (2006). Campus mental health services: Recommendations for change. *American Journal of Orthopsychiatry*, 76(2), 226-237.
- Moynihan, M. M., & Banyard, V. L. (2008). Community responsibility for preventing sexual violence: A pilot study with campus Greeks and intercollegiate athletes. *Journal of Prevention & Intervention in the Community*, 36(1-2), 23-38.
- National Institute on Alcohol Abuse and Alcoholism [NIAAA]. (2002). A call to action: Changing the culture of drinking at US colleges. *Final report of the Task Force on College Drinking* (NIH Pub. No. 02-5010).

- National Research Council. (2009). Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. Washington, DC: National Academies Press.
- Parcover, J., Mays, S., & McCarthy, A. (2015). Implementing a public health approach to addressing mental health needs in a university setting: Lessons and challenges. *Journal of College Student Psychotherapy*, 29(3), 197-210.
- Perkins, H. W. (2002). Social norms and the prevention of alcohol misuse in collegiate contexts. *Journal of Studies on Alcohol, Supplement*, (14), 164-172.
- Perkins, H. W., Haines, M. P., & Rice, R. (2005). Misperceiving the college drinking norm and related problems: a nationwide study of exposure to prevention information, perceived norms and student alcohol misuse. *Journal of Studies on Alcohol*, 66(4), 470-478.
- Perron, B. E., Grahovac, I. D., Uppal, J. S., Granillo, T. M., Shutter, J., & Porter, C. A. (2011). Supporting students in recovery on college campuses: Opportunities for student affairs professionals. *Journal of Student Affairs Research and Practice*, 48(1), 47-64.
- Porter, S. R., & Pryor, J. (2007). The effects of heavy episodic alcohol use on student engagement, academic performance, and time use. *Journal of College Student Development*, 48(4), 455-467.
- Rosen, D. S., Blum, R. W., Britto, M., Sawyer, S. M., & Siegel, D. M. (2003). Transition to adult health care for adolescents and young adults with chronic conditions: position paper of the Society for Adolescent Medicine. *Journal of Adolescent Health*, 33(4), 309-311.
- Ryan, B. E., & DeJong, W. (1998). Making the Link: Faculty and Prevention.
- Sax, L. J., Bryant, A. N., & Harper, C. E. (2005). The differential effects of student-faculty interaction on college outcomes for women and men. *Journal of College Student Development*, 46(6), 642-657.
- Schulenberg, J. E., & Maggs, J. L. (2002). A developmental perspective on alcohol use and heavy drinking during adolescence and the transition to young adulthood. *Journal of Studies on Alcohol, Supplement*, (14), 54-70.
- Scott-Sheldon, L. A., Carey, K. B., Elliott, J. C., Garey, L., & Carey, M. P. (2014). Efficacy of alcohol interventions for first-year college students: a meta-analytic review of randomized controlled trials. *Journal of Consulting and Clinical Psychology*, 82(2), 177.
- Smith, W. A., Allen, W. R., & Danley, L. L. (2007). "Assume the position... you fit the description" psychosocial experiences and racial battle fatigue among African American male college students. *American Behavioral Scientist*, 51(4), 551-578.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2007). Building Bridges. Mental Health on Campus: Student Mental Health Leaders and College Administrators, Counselors, and Faculty in Dialogue. (2007). HHS Pub. No. SMA-4310. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2019). *Behavioral Health Among College Students Information & Resource Kit*. HHS Publication No. (SMA) 19-5052. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Tompkins, T. L., & Witt, J. (2009). The short-term effectiveness of a suicide prevention gatekeeper training program in a college setting with residence life advisers. *The Journal of Primary Prevention*, 30(2), 131-149.
- Toomey, T. L., & Wagenaar, A. C. (2002). Environmental policies to reduce college drinking: options and research findings. *Journal of Studies on Alcohol, supplement*, (14), 193-205.
- Turrisi, R., Jaccard, J., Taki, R., Dunnam, H., & Grimes, J. (2001). Examination of the short-term efficacy of a parent intervention to reduce college student drinking tendencies. *Psychology of Addictive Behaviors*, 15(4), 366.
- Vastag, B. (2001). Suicide prevention plan calls for physicians' help. *JAMA*, 285(21), 2701-2703.
- Vicary, J. R., & Karshin, C. M. (2002). College alcohol abuse: A review of the problems, issues, and prevention approaches. *Journal of Primary Prevention*, 22(3), 299-331.
- Wechsler, H., & Nelson, T. F. (2008). What we have learned from the Harvard School of Public Health College Alcohol Study: Focusing attention on college student alcohol consumption and the environmental conditions that promote it. *Journal of Studies on Alcohol and Drugs*, 69(4), 481-490.

Wood, M. D., Read, J. P., Mitchell, R. E., & Brand, N. H. (2004). Do parents still matter? Parent and peer influences on alcohol involvement among recent high school graduates. *Psychology of Addictive Behaviors*, 18(1), 19.

Yearwood, E., & Riley, J. B. (2010). Curriculum infusion to promote nursing student well-being. *Journal of Advanced Nursing*, 66(6), 1356-1364.

Yorgason, J. B., Linville, D., & Zitzman, B. (2008). Mental health among college students: do those who need services know about and use them? *Journal of American College Health*, 57(2), 173-182.

Young, C. C., & Calloway, S. J. (2015). Transition planning for the college bound adolescent with a mental health disorder. *Journal of Pediatric Nursing*, 30(5), e173-e182.

Zimmerman, R., & DeJong, W. (2003). *Safe lanes on campus: A guide for preventing impaired driving and underage drinking* (No. HS-043 645).

Best Practices for Treating Mental Health and Substance Use Disorders in Treatment Settings

Both mental health and substance use disorders are diseases that have biological, psychological, social, and spiritual components (Peters, Taylor, Lyketsos, & Chisolm, 2012). Treatments for mental health and substance use disorders encompass a spectrum of programs, therapies, and other strategies, each at varying intensities. A common theme of treatment for these disorders is that they should be delivered with empathy, without confrontation (MHA, 2017), and individuals should be treated with dignity and respect for their personhood (Marcovitz, 2019).

Treatment strategies exist along a spectrum based on need that includes evidence-based behavioral health interventions and therapies (for example residential and outpatient treatment programs), medication, psychosocial and peer support, and other strategies. Treatment should occur early, be tailored as much as possible to the unique needs of individuals, and be delivered by highly trained health professionals and support personnel (SAMHSA, 2019a).

Guiding Best Practices

Applying Biopsychosocial Perspectives

What is it?

Biopsychosocial approaches utilize treatment strategies that address the biological, psychological, and social conditions that have contributed to a patient's disease (Marcovitz, 2019). Assessment, diagnosis and treatment strategies should follow a biopsychosocial framework to avoid taking a limited perspective on complex disorders such as mental health and substance use disorders (George & Engel, 1980).

Key Features and Benefits:

The *Perspectives of Psychiatry* Approach. The four perspectives approach is grounded in the premise that behavioral health disorders have multiple causes and that the most effective treatment will be gained by understanding the biopsychosocial origin of the disease. The four perspectives approach was originally identified by McHugh & Slavney (1998). It has subsequently been refined by psychiatric and behavioral health departments at Johns Hopkins University (Kaminsky et al., 2007), and adopted by clinicians worldwide to treat various behavioral and medical disorders (Peters et al., 2012). When creating a treatment plan, a provider should seek to understand four perspectives of a patient: disease, dimensions, behavior, and life story. These perspectives can also be thought of as what the patient has, is, does, and encounters ("HIDE").

- **The Disease Perspective:** *What the patient "Has."* The disease perspective focuses on the underlying biological condition that is present in the development of a disorder. For example, the presence or absence of neurotransmitters in the brain that lead to addiction or the brain pathology that is thought to lead to diseases like schizophrenia or bipolar disorder. This perspective is grounded in pathology, etiology, and curing of disease.

- **The Dimensional Perspective:** *Who the patient “Is.”* This perspective attends to the physiological and psychological characteristics of an individual who is experiencing a disorder. These characteristics may increase a person’s potential to react to symptoms of a disorder and affect their receptivity to treatment strategies. Examples of patient dimensions are personality, intelligence, and genetic predispositions for disorders.
- **The Behavior Perspective:** *What the patient “Does.”* The behavior perspective considers a patient’s choices, motivations, and responses to behavioral disorders. Examples of behavior include adhering to medication plans and self-medication of substance use disorder. A goal of considering behavior is making behavioral or lifestyle changes.
- **The Life Story Perspective:** *What the patient “Encounters.”* Mental health and substance use disorders are often the result of experiences patients have encountered in their life (Low et al., 2012). The life story perspective is an understanding of the settings, sequences, and outcomes of what a patient has encountered that contributes to the disorder they are experiencing. A patient may be experiencing interpersonal relationship turmoil or may have recently lost their job or place of residence. Understanding a patient’s life story can help provide guidance on how to treat a disorder.

The 4 P’s to Case Formulation. A similar biopsychosocial approach to formulating a treatment plan for child psychiatric disorders was developed by Barker (1995) and has been adapted for use in other contexts including substance use treatment (e.g., Le Bon et al., 2004; Malhi et al., 2015). This approach known as “the four P’s” seeks to provide a framework for understanding the factors (predisposing, precipitating, perpetuating, protective) that influence risk for mental health and/or substance use disorders.

- Predisposing factors are biological, social, or environmental factors that put an individual at risk for experiencing a disorder (e.g., family history of substance use disorder, positive beliefs about using substances).
- Precipitating factors refer to events or conditions that trigger the onset of the current disorder (e.g., peer pressure, stress in the home environment).
- Perpetuating factors maintain the disorder once it has been established (e.g., risk-taking behaviors, low self-esteem or coping skills).
- Protective factors are the strengths of the individual or environmental supports that reduce the severity of disorder or promote behaviors or conditions that facilitate adaptive coping with the disorder (e.g., a positive attitude towards treatment, family support).

Considerations for Implementation:

Recognizing that mental health and substance use issues are caused by multiple intersecting aspects of a patient’s life and practically applying that perspective in an active and busy treatment setting can be challenging (Sperry, 1992, Peters et al., 2012). The following factors should be considered for operationalizing treatment to more effectively address the “whole” patient.

- To address each domain of health in a patient, team-based treatment and community partnerships should be established (e.g., criminal justice, social services) (Oden, 2019).
- Implement evidence-based psychosocial interventions (e.g., cognitive-behavioral therapy, medication assisted treatment, etc.) in order to treat all dimensions of the disease (see guiding best practice sections below).

- Biopsychosocial perspectives are beneficial for both mental health, substance use and co-occurring disorders (e.g., Buckner, Heimberg, Ecker, & Vinci, 2014; Cheatle & Gallagher, 2006).
- A key purpose of holistic perspectives in treatment is performing more than just a checklist assessment (Peters et al., 2012). Clinicians must perform robust and detailed evaluations.
- Treatments should be as individualized as possible as patients' histories and ecologies are highly unique to them (Adams & Grieder, 2004).

Evidence-Based Psychosocial Interventions

What is it?

Psychosocial therapies, interventions, and/or evidence-based programs for treating mental health and substance use disorders are interpersonal or informational activities, techniques, or strategies that target factors (e.g., biological, cognitive, social) with the aim of improving health functioning and well-being (England, Butler, & Gonzalez, 2015). Interventions of this type cover a broad range of activities, targeted disorders, and implementation settings. However, they typically involve interpersonal contact between a clinician and a client as a crucial element (Barth et al., 2016).

The psychosocial interventions outlined in this section have consistently been found to be effective in treating mental health and substance use disorders (IOM, 2006; Barth et al., 2016) and are recognized by SAMHSA's Evidence-Based Practices Resource Center as evidence-based for the prevention and treatment of mental health conditions (SAMHSA, 2019b).

Cognitive-Behavioral Therapy (CBT). CBT focuses on changing maladaptive cognitions and behaviors that enable risk behaviors and result in poor states of mental health (Dobson, 1989; Osilla et al., 2009). CBT is highly adaptable to treat unique patient needs and situations and has been found to be effective in treating co-occurring mental health and substance use disorders (Horsfall et al., 2009). CBT is also considered an appropriate intervention for individuals of all ages (Grave & Blissett, 2004; Wetherell, Gatz, & Craske, 2003).

Assertive Community Treatment (ACT). ACT consists of the development of a mobile, interdisciplinary treatment team that provides support and helps patients develop skills to maintain healthy living and avoid hospitalization and incarceration (Stein & Test, 1980). ACT is typically employed for individuals with serious mental illness such as depression, schizophrenia, and bipolar disorder (SAMHSA, 2008). Key aspects of ACT are a high case worker-to-patient ratio and consistent staff availability.

Illness Management and Recovery (IMR). The aim of IMR is to educate individuals about the mental health and/or substance use disorder they are experiencing in order to empower them to make recovery goals and decisions and learn coping skills (SAMHSA, 2009). IMR involves structured weekly sessions where mental health practitioners help patients to develop tailored strategies for coping with their illness, construct their own goals for recovery and direct patients' decision-making about their treatment (Mueser et al., 2002).

Contingency Management (CM). CM is an intervention used mainly to treat substance use disorders. Patients are provided with tangible incentives for adhering to treatments or meeting desired health outcomes (Prendergast et al., 2006). CM has been found to be effective and may also benefit group dynamics in treatment settings by increasing patient morale (Petry, 2011).

Key Features and Benefits:

- When given the choice, psychosocial interventions are often preferred by patients to medication (McHugh et al., 2013).
- Psychosocial interventions are an effective alternative when medication is not advised, such as in the case of youth and pregnant individuals (Antshel & Barkley, 2008; Chamberlain et al., 2017).
- Psychosocial interventions support other types of treatments such as medication by addressing underlying behavioral mechanisms that disrupt their effectiveness or patients' adherence to standard medical treatments (England, Butler, & Gonzalez, 2015).
- Interventions can often be delivered via real time methods such as mobile devices and the internet, and self-guided formats such as using literature to increase mental health literacy (Hanley & Reynolds, 2009).

Considerations for Implementation:

- Practitioners must be highly trained to deliver evidence-based therapy with fidelity (Weissman et al., 2006).
- The diversity of systems of care providers (e.g., treatment, education, criminal justice) can contribute to poor coordination and implementation of psychosocial interventions (Colton & Manderscheid, 2011). When implementing interventions, the principal foundations of the intervention should be communicated between care providers so that efforts do not work at cross purposes (see warm-handoffs in the Primary Care/Hospitals section of this review).
- Interventions should be tailored with the right level of intensity, based on a patient's readiness to change their situation and/or behavior (Horsfall et al., 2009).

Medication-Assisted Treatment (MAT)

What is it?

Substance use disorders and the recovery process are commonly paired with strong physiological cravings that can interfere with treatment, increase the risk of relapse (CSAT, 2006), and induce irreparable changes in the brain (Oscar-Berman & Marinkovic, 2003). There are several FDA approved medications that are prescribed to treat opioid and alcohol use disorders (SAMHSA, 2019c). The Centers for Disease Control and Prevention recommends that individuals have access to MAT programs through treatment centers in communities to combat alcohol and drug addiction (Dowell, Haegerich, & Chou, 2016).

Key Features and Benefits:

- The use of MAT in conjunction with counseling has been found to successfully normalize brain chemistry that has been altered by substance use, relieve physiological cravings, and assist in reducing negative withdrawal symptoms (SAMHSA, 2019c; Kranzler & Van Kirk, 2001).
- Patients are more likely to stay in treatment and survive with the addition of MAT in their treatment regimen (SAMHSA, 2019c).
- The use of MAT can facilitate adherence to treatment through maintaining a therapeutic correspondence with a treatment provider, enhancing motivation to stay in treatment, and improving patients' attitudes towards change (CSAT, 2009a).
- MAT has been found to also reduce risks for contracting other communicable infections like hepatitis (SAMHSA, 2019c).

Though it is beyond the capacity for this broad review to list all approved medications and recommendations for their use, the following MAT resources have been assessed and endorsed by SAMSHA and the Health Resources and Services Administration's Center for Integrated Health Solutions (CIHS):

- [Medication Assisted Treatment Implementation Checklist](#). A checklist from CIHS that outlines the key questions for communities to consider before initiating efforts to increase access to medication assisted treatment for addictions.
- [Medication for the Treatment of Alcohol Use Disorder: A Brief Guide](#). This manual provides guidance on the use of medication-assisted treatment for alcohol use. It summarizes approved medications, screening and assessment, treatment planning, and patient monitoring.
- [Procedures for Medication-Assisted Treatment of Alcohol or Opioid Dependence in Primary Care](#). A guidebook from the RAND corporation on identifying and treating patients with substance use disorders in primary care settings.

Considerations for Implementation:

- Though withdrawal management or detoxification can be an important first step in recovery (Kosten & O'Connor, 2003), it is not considered to be treatment (CSAT, 2006).
- MAT used in conjunction with psychosocial treatment and supports and/or evidence-based therapies is considered the most effective for treating substance use disorders (CSAT, 2009a).
- Combining medications used in MAT with other psychiatric medications can be fatal (Connery, 2015).
- The discontinuation of MAT should be carefully evaluated by a health professional and ideally followed by a program of recovery (Kampman & Jarvis, 2015).

Recovery Support Services (RSS)

What is it?

Recovery supports services and systems are non-clinical services that assist individuals and families in their recovery (Kaplan, 2008). RSSs complement psychosocial interventions and the use of medication when treating individuals with both mental health and substance use disorders (CSAT, 2009b). RSSs can be important alternatives for care when barriers exist to accessing medications or other evidence-based programs (Feldman, 2019). Examples of RSSs are mutual help groups (e.g., Alcoholics Anonymous and other 12-Step groups), transitional housing and alternative high schools, sober-living residences, faith-based groups, and employment services. RSSs operate through the dimensions of health (e.g., treatment), home (e.g., housing and amenities for living), purpose (e.g., education, employment, and independence), and community (e.g., relationships with friends and family).

A key component of RSSs are peer support specialists. Peer support specialists are individuals who provide emotional, informational, and instrumental support to individuals engaged in treatment and recovery (CSAT, 2009b). Peer support specialists may be engaged in recovery themselves and share life experiences with the people they are supporting (CSAT, 2009b). In addition to providing emotional support, peer support specialists assist recoverees with employment, housing, education, connections to social support, and managing their recovery.

Key Features and Benefits:

- RSSs help create a continuum of care, which is beneficial for treating chronic conditions such as addiction (Laudet & Humphreys, 2013; Bassuk et al., 2016).
- RSS staff and peer specialists can better connect individuals to mental health services in the community by accompanying individuals to psychiatric or counseling appointments, instead of simply providing an address to go to (Murphy, 2019). This aligns with warm-handoff best practices.
- RSS addresses the environmental and psychological processes involved in recovery (Feldman, 2019).
- RSS helps mitigate stigma and shame associated with substance use disorders and MAT (Kaplan, 2008).

Considerations for Implementation:

- Recovery support services should be flexible in order to meet individuals where they are in recovery. The type of supports, mentoring, and recovery coaching offered should be appropriate for the age group being treated (Laudet & Humphreys, 2013).
- Peer support specialists should receive training. Most states require formal certification to become a peer support specialist (CMWN, 2019; Copeland Center for Wellness and Recovery, n.d.).
- Staff having lived experience with a disorder is a critical component of providing peer support, and now is a requirement of several certification agencies (HCH, 2013).
- It is important that peer support specialists establish and maintain clear professional boundaries in their roles as non-clinical support specialists (White, 2006).

Special Considerations

Co-Occurring Mental Health and Substance Use Disorders

The existence of co-occurring disorders in patients should not be considered an exception, given the established relationship between mental health and substance use (Minkoff, 2001). Each mental health and/or substance use disorder should be regarded as a primary disorder when they coexist (SAMHSA, 2015, 2016a, 2016b). This is especially important when considering admittance requirements to treatment centers.

Treatment for individuals experiencing one or more mental health and/or substance use disorders is complex, especially when considering potential drug interactions (e.g., a medication that helps treat one disorder may exacerbate another; Kelly & Daley, 2013). The co-occurrence of disorders has implications for psychosocial and behavioral health interventions as well (Drake, Mueser, Brunette, & McHugo 2004; Drake, O'Neal, & Wallach, 2007). Interventions should generally be staged in purpose and intensity to match each co-occurring disorder as they are treated over time (Minkoff, 2001). Medication for mental illness should not be discontinued as a result of a patient using substances, except in the case of benzodiazepines and other anxiety medications (Brunette, Noordsy, Xie, & Drake, 2003).

On an organizational level, research and practitioners recommend integrated approaches and models for treatment of co-occurring disorders (RachBeisel, Scott, & Dixon, 1999; Drake et al., 2001). Integrated treatments involve the combination of mental health and substance use treatments into one seamless treatment, as opposed to parallel efforts (Drake et al., 2001). This includes selecting interventions appropriate for both disorders (Carey, 1996), the adaptation of traditional interventions (Bellack & DiClemente, 1999), and the creation of interdisciplinary treatment teams that work in the same setting (Drake et al., 2001).

References

- Adams, N., & Grieder, D. M. (2004). *Treatment planning for person-centered care: The road to mental health and addiction recovery*. Elsevier.
- Antshel, K. M., & Barkley, R. (2008). Psychosocial interventions in attention deficit hyperactivity disorder. *Child and Adolescent Psychiatric Clinics of North America*, 17(2), 421-437.
- Barker, P. (1995). *The child and adolescent psychiatry evaluation: basic child psychiatry*. Oxford, UK: Blackwell Scientific, Inc.
- Barth, J., Munder, T., Gerger, H., Nüesch, E., Trelle, S., Znoj, H., ... & Cuijpers, P. (2016). Comparative efficacy of seven psychotherapeutic interventions for patients with depression: a network meta-analysis. *Focus*, 14(2), 229-243.
- Bassuk, E. L., Hanson, J., Greene, R. N., Richard, M., & Laudet, A. (2016). Peer-delivered recovery support services for addictions in the United States: a systematic review. *Journal of Substance Abuse Treatment*, 63, 1-9.
- Bellack, A. S., & DiClemente, C. C. (1999). Treating substance abuse among patients with schizophrenia. *Psychiatric Services*, 50(1), 75-80.
- Brunette, M. F., Noordsy, D. L., Xie, H., & Drake, R. E. (2003). Benzodiazepine use and abuse among patients with severe mental illness and co-occurring substance use disorders. *Psychiatric Services*, 54(10), 1395-1401.
- Buckner, J. D., Heimberg, R. G., Ecker, A. H., & Vinci, C. (2013). A biopsychosocial model of social anxiety and substance use. *Depression and Anxiety*, 30(3), 276-284.
- Carey, K. B. (1996). Substance use reduction in the context of outpatient psychiatric treatment: A collaborative, motivational, harm reduction approach. *Community Mental Health Journal*, 32(3), 291-306.
- Center for Substance Abuse Treatment [CSAT]. (2006). Detoxification and Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 45. HHS Publication No. (SMA) 15-4131. Rockville, MD: Center for Substance Abuse Treatment
- Center for Substance Abuse Treatment [CSAT]. (2009a) Incorporating Alcohol Pharmacotherapies into Medical Practice. Treatment Improvement Protocol (TIP) Series 49. HHS Publication No. (SMA) 09-4380. Rockville, MD: Substance Abuse and Mental Health Services Administration
- Center for Substance Abuse Treatment [CSAT]. (2009b). What are peer recovery support services? (HHS Publication No. (SMA) 09-4454). Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Chamberlain, C., O'Mara-Eves, A., Porter, J., Coleman, T., Perlen, S. M., Thomas, J., & McKenzie, J. E. (2017). Psychosocial interventions for supporting women to stop smoking in pregnancy. *Cochrane Database of Systematic Reviews*, (2).
- Cheatle, M. D., & Gallagher, R. M. (2006). Chronic pain and comorbid mood and substance use disorders: a biopsychosocial treatment approach. *Current Psychiatry Reports*, 8(5), 371-376.
- Colorado Mental Health Wellness Network [CMWN]. (2019). Recovery Education Programs. Retrieved from: <https://coloradomentalwellnessnetwork.org/recovery-education/>
- Colton, C. W., & Manderscheid, R. W. (2011). Congruencies in Increased Mortality Rates, Years of Potential Life Lost, and Causes of Death among Public Mental Health Clients in Eight States. *Preventing Chronic Disease*. 2006; 3 (2): 1-14.
- Connery, H. S. (2015). Medication-assisted treatment of opioid use disorder: review of the evidence and future directions. *Harvard Review of Psychiatry*, 23(2), 63-75.
- Copeland Center for Wellness and Recovery. (n.d.) Doors to Wellbeing Peer Specialists. Retrieved from: <https://copelandcenter.com/peer-specialists>
- Dobson, K. S. (1989). A meta-analysis of the efficacy of cognitive therapy for depression. *Journal of Consulting and Clinical Psychology*, 57(3), 414.
- Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC guideline for prescribing opioids for chronic pain—United States, 2016. *Jama*, 315(15), 1624-1645.

- Drake, R. E., Essock, S. M., Shaner, A., Carey, K. B., Minkoff, K., Kola, L., ... & Rickards, L. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52(4), 469-476.
- Drake, R. E., Mueser, K. T., Brunette, M. F., & McHugo, G. J. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatric Rehabilitation Journal*, 27(4), 360.
- Drake, R. E., O'Neal, E. L., & Wallach, M. A. (2008). A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. *Journal of Substance Abuse Treatment*, 34(1), 123-138.
- England, M. J., Butler, A. S., & Gonzalez, M. L. (Eds.). (2015). *Psychosocial interventions for mental and substance use disorders: A framework for establishing evidence-based standards*. Washington, DC: National Academies Press.
- Feldman, B. (2019). SAMHSA Bringing Recovery Supports to Scale Technical Assistance Center Strategy Living Proof Series Recovery Supports for People with Opioid Use Disorder (OUD) or Co-occurring Disorders Using Medication Assisted Treatment (MAT) [Webinar].
- George, E., & Engel, L. (1980). The clinical application of the biopsychosocial model. *American Journal of Psychiatry*, 137(5), 535-544.
- Grave, J., & Blissett, J. (2004). Is cognitive behavior therapy developmentally appropriate for young children? A critical review of the evidence. *Clinical Psychology Review*, 24(4), 399-420.
- Hanley, T., & Reynolds, D. J. (2009). Counselling psychology and the internet: A review of the quantitative research into online outcomes and alliances within text-based therapy. *Counselling Psychology Review*, 24(2), 4-13.
- Health Care for the Homeless Clinician's Network [HCH]. (2013). Speaking from Experience: The Power of Peer Specialists. *Healing Hands*, 17(3). Retrieved from: <https://nhchc.org/wp-content/uploads/2019/08/healinghandsfall2013.pdf>
- Heinzerling, K. G., Ober, A. J., Lamp, K., De Vries, D., & Watkins, K. E. (2016). *SUMMIT: Procedures for medication-assisted treatment of alcohol or opioid dependence in primary care*. RAND. Retrieved from: https://www.integration.samhsa.gov/clinical-practice/mat/RAND_MAT_guidebook_for_health_centers.pdf
- Horsfall, J., Cleary, M., Hunt, G. E., & Walter, G. (2009). Psychosocial treatments for people with co-occurring severe mental illnesses and substance use disorders (dual diagnosis): A review of empirical evidence. *Harvard Review of Psychiatry*, 17(1), 24-34.
- Institute of Medicine [IOM]. Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders. (2006). *Improving the quality of health care for mental and substance-use conditions*. National Academy Press.
- Kaminsky, M., McCabe, O. L., Langlieb, A. M., & Everly Jr, G. S. (2007). An evidence-informed model of human resistance, resilience, and recovery: The Johns Hopkins' outcome-driven paradigm for disaster mental health services. *Brief Treatment and Crisis Intervention*, 7(1), 1.
- Kampman, K., & Jarvis, M. (2015). American Society of Addiction Medicine (ASAM) national practice guideline for the use of medications in the treatment of addiction involving opioid use. *Journal of Addiction Medicine*, 9(5), 358.
- Kaplan, L. (2008). The role of recovery support services in recovery-oriented systems of care. (DHHS Publication No. (SMA) 08-4315). Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Kelly, T. M., & Daley, D. C. (2013). Integrated treatment of substance use and psychiatric disorders. *Social work in Public Health*, 28(3-4), 388-406.
- Kranzler, H. R., & Van Kirk, J. (2001). Efficacy of naltrexone and acamprosate for alcoholism treatment: a meta-analysis. *Alcoholism: Clinical and Experimental Research*, 25(9), 1335-1341.
- Kosten, T. R., & O'Connor, P. G. (2003). Management of drug and alcohol withdrawal. *New England Journal of Medicine*, 348(18), 1786-1795.
- Laudet, A. B., & Humphreys, K. (2013). Promoting recovery in an evolving policy context: What do we know and what do we need to know about recovery support services? *Journal of Substance Abuse Treatment*, 45(1), 126-133.
- Le Bon, O., Basiaux, P., Streel, E., Tecco, J., Hanak, C., Hansenne, M., ... & Dupont, S. (2004). Personality profile and drug of choice; a multivariate analysis using Cloninger's TCI on heroin addicts, alcoholics, and a random population group. *Drug and Alcohol Dependence*, 73(2), 175-182.

- Low, N. C., Dugas, E., O'Loughlin, E., Rodriguez, D., Contreras, G., Chaiton, M., & O'Loughlin, J. (2012). Common stressful life events and difficulties are associated with mental health symptoms and substance use in young adolescents. *BMC psychiatry*, 12(1), 116.
- Malhi, G. S., Bassett, D., Boyce, P., Bryant, R., Fitzgerald, P. B., Fritz, K., ... & Porter, R. (2015). Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for mood disorders. *Australian & New Zealand Journal of Psychiatry*, 49(12), 1087-1206.
- Marcovitz, D. (2019). SAMHSA Bringing Recovery Supports to Scale Technical Assistance Center Strategy Living Proof Series Neurobiology of Opioid Use Disorder and Medication for Opioid Use Disorder: Implications for Co-occurring Disorders [Webinar].
- McHugh, P. R., & Slavney, P. R. (1998). *The perspectives of psychiatry*. JHU Press.
- McHugh, R. K., Whitton, S. W., Peckham, A. D., Welge, J. A., & Otto, M. W. (2013). Patient preference for psychological vs. pharmacological treatment of psychiatric disorders: a meta-analytic review. *The Journal of Clinical Psychiatry*, 74(6), 595.
- Mental Health America [MHA]. 2017. Position Statement 33: Substance Use Disorders. Retrieved from <http://www.mentalhealthamerica.net/positions/co-occurring>
- Minkoff, K. (2001). Best practices: developing standards of care for individuals with co-occurring psychiatric and substance use disorders. *Psychiatric Services*, 52(5), 597-599.
- Mueser, K. T., Corrigan, P. W., Hilton, D. W., Tanzman, B., Schaub, A., Gingerich, S., ... & Herz, M. I. (2002). Illness management and recovery: A review of the research. *Psychiatric Services*, 53(10), 1272-1284.
- Murphy, A. (2019). SAMHSA Bringing Recovery Supports to Scale Technical Assistance Center Strategy Living Proof Series Recovery Supports for People with Opioid Use Disorder (OUD) or Co-occurring Disorders Using Medication Assisted Treatment (MAT) [Webinar].
- Oden, R. (2019). SAMHSA Bringing Recovery Supports to Scale Technical Assistance Center Strategy Living Proof Series Recovery Supports for People with Opioid Use Disorder (OUD) or Co-occurring Disorders Using Medication Assisted Treatment (MAT) [Webinar].
- Oscar-Berman, M., & Marinkovic, K. (2003). Alcoholism and the brain: an overview. *Alcohol Research & Health*, 27(2), 125-133.
- Osilla, K. C., Hepner, K. A., Muñoz, R. F., Woo, S., & Watkins, K. (2009). Developing an integrated treatment for substance use and depression using cognitive-behavioral therapy. *Journal of Substance Abuse Treatment*, 37(4), 412-420.
- Peters, M. E., Taylor, J., Lyketsos, C. G., & Chisolm, M. S. (2012). Beyond the DSM: The perspectives of psychiatry approach to patients. *The Primary Care Companion for CNS Disorders*, 14(1).
- Petry, N. M. (2011). Contingency management: what it is and why psychiatrists should want to use it. *The Psychiatrist*, 35(5), 161-163.
- Prendergast, M., Podus, D., Finney, J., Greenwell, L., & Roll, J. (2006). Contingency management for treatment of substance use disorders: A meta-analysis. *Addiction*, 101(11), 1546-1560.
- RachBeisel, J., Scott, J., & Dixon, L. (1999). Co-occurring severe mental illness and substance use disorders: a review of recent research. *Psychiatric Services*, 50(11), 1427-1434.
- Sperry, L. (1992). Demystifying the psychiatric case formulation. *Jefferson Journal of Psychiatry*, 10(2), 4.
- Stein, L. I., & Test, M. A. (1980). Alternative to mental hospital treatment: I. Conceptual model, treatment program, and clinical evaluation. *Archives of General Psychiatry*, 37(4), 392-397.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2008). Assertive Community Treatment: Building Your Program. DHHS Pub. No. SMA-08-4344, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2009). Illness Management and Recovery: Building Your Program. HHS Pub. No. SMA-09-4462, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services

- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2015). Adults with Attention Deficit Hyperactivity Disorder and Substance Use Disorders. Advisory, Volume 14, Issue 3.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2016a). Obsessive-Compulsive Disorder and Substance Use Disorders. Advisory, Volume 15, Issue 3.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2016b). An Introduction to Bipolar Disorder and Co-Occurring Substance Use Disorders. Advisory, Volume 15, Issue 2
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2019a). Behavioral Health Treatments and Services. Retrieved from: <https://www.samhsa.gov/find-help/treatment>
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2019b). *Evidence-based Practices Resource Center*. Retrieved from: <https://www.samhsa.gov/ebp-resource-center>
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2019c). Medication and Counseling Treatment. Retrieved from: <https://www.samhsa.gov/medication-assisted-treatment/treatment>
- Substance Abuse and Mental Health Services Administration [SAMHSA] and Health Resources and Services Administration's Center for Integrated Health Solutions [CIHS]. (n.d.). Medication Assisted Treatment Implementation Checklist. Retrieved from: https://www.integration.samhsa.gov/clinical-practice/mat/MAT_Implementation_Checklist_FINAL.pdf
- Substance Abuse and Mental Health Services Administration [SAMHSA] and National Institute on Alcohol Abuse and Alcoholism [NIAAA], (2015). Medication for the Treatment of Alcohol Use Disorder: A Brief Guide. HHS Publication No. (SMA) 15-4907. Rockville, MD: Substance Abuse and Mental Health Services Administration, Retrieved from: <https://store.samhsa.gov/system/files/sma15-4907.pdf>
- Weissman, M. M., Verdelli, H., Geleroff, M. J., Bledsoe, S. E., Betts, K., Mufson, L., ... & Wickramaratne, P. (2006). National survey of psychotherapy training in psychiatry, psychology, and social work. *Archives of General Psychiatry*, 63(8), 925-934.
- Wetherell, J. L., Gatz, M., & Craske, M. G. (2003). Treatment of generalized anxiety disorder in older adults. *Journal of Consulting and Clinical Psychology*, 71(1), 31.
- White, W. (2006). Sponsor, recovery coach, addiction counselor: The importance of role clarity and role integrity.

Best Practices for Treating Mental Health and Substance Use Disorders in Law Enforcement and Jail Settings

Individuals with serious mental illness, substance use disorders, and medical health issues are overrepresented in jails and prisons (Fazel, Bains, & Doll, 2006; Steadman et al., 2009; Baillargeon et al., 2009), up to four times the rate as in non-incarcerated populations (Prins & Draper, 2009; Torrey et al., 2010; Fazel & Seewald, 2012). Individuals interacting with law enforcement and/or in jail settings while experiencing mental health and/or substance use disorders are at the height of vulnerability (Birmingham, 2003). As a result, the criminal justice setting is tasked with both the protection of society and an opportunity for screening, treating, and connecting individuals to community services upon reentry (National Research Council, 2014). In general, diversion into treatment and other services and away from the criminal justice system is recommended for people experiencing behavioral health disorders (Naples & Steadman, 2003; McNiel, Binder, & Robinson, 2005; Warner & Kramer, 2009). Behavioral health diversion (hereafter referred to as diversion) is different from adult, or juvenile diversion programs, which are a form of criminal offender sentencing that offers participation in a rehabilitation program in lieu of conviction or other legal consequences.

Guiding Best Practices

Police and Mental Health Collaboration (PMHC) Models

What is it?

Law enforcement officers have a considerable degree of influence in facilitating successful diversion of vulnerable individuals from criminal justice settings to community health services (Reuland, 2004; Broner, Lattimore, Cowell, & Schlenger, 2004). However, officers are heavily burdened with public safety responsibilities and cannot be solely responsible for diversion (USDJBJA, 2019). Police and Mental Health Collaborations (PMHCs) are comprehensive partnerships between law enforcement and behavioral health specialists that implement one or more response models in order to serve those experiencing mental health and/or substance use needs (USDJBJA, n.d.). Law enforcement leadership teams select models that are most appropriate depending on their community's behavioral health needs and capacity for response. Models typically involve employing either police-based (e.g., trained officers) or mental-health-based (e.g., community behavioral health professionals) teams that are available in response to a mental health or substance use related crisis (Steadman, Deane, Borum & Morrison, 2000). Individuals are connected with community services to help them meet their basic needs (Loveland & Boyle, 2007).

Key Features and Benefits:

Law Enforcement Assisted Diversion (LEAD). LEAD is a community-based, pre-booking program intended to divert individuals from the criminal justice system and into behavioral health case management (Beckett, 2014). During or before an arrest, eligible LEAD participants are identified by police officers who then refer them to a LEAD case manager. The case manager then works with participants to create an intervention plan that is tailored to their needs including housing, treatment, education, employment or other services (Beckett, 2014). LEAD emphasizes a harm-reduction approach, and that clients receive immediate services through available LEAD resources, rather than being placed on waiting lists for services.

- Participants in LEAD programs have been found to be more likely to obtain housing, employment, and legitimate income (Clifasefi, Lonczak, & Collins, 2017).
- The LEAD program reduces short- and long-term recidivism (Collins, Lonczak, & Clifasefi, 2017).
- Law enforcement and community health stakeholders participating in LEAD report developing collaborative relationships (Beckett, 2014).

Crisis Intervention Teams (CIT). The CIT model centers around training police officers and call dispatchers on signs and symptoms of mental health disorders, the use of de-escalation techniques during a crisis, and the availability of community mental health services (Usher et al., 2019; Watson & Fulambarker, 2012). In addition to training, the use of CIT involves community partnerships between law enforcement and community mental health providers including the coordination of a centralized psychiatric emergency drop-off site to support both individuals in need and law enforcement operations (Steadman et al., 2001; Dupont, Cochran, & Pillsbury, 2007).

- CITs have been associated with greater identification of persons with mental health disorders in need, fewer arrests of persons with mental health issues, and greater involvement of community mental health services with law enforcement (Steadman et al., 2000; Teller, Munetz, Gil, & Ritter, 2006).
- CIT programs have been found to reduce the use of force by officers when suspects resist arrest (Morabito et al., 2012).
- CIT training has been found to improve officers' attitudes and knowledge about mental health (Compton et al., 2006), as well as officers' confidence in responding to persons with mental health disorders (Wells & Schaefer, 2006).

Co-responder Teams. Co-response is a generic term for a team strategy that consists of a specially trained police officer and one or more mental health and/or paramedic professionals that respond together to mental health and/or substance use related calls (Reuland, 2004; Hay, 2014). These teams are sometimes called mobile crisis teams, or street triage. The co-responder model can vary greatly in terms of implementation and organizational structure (Puntis et al., 2018). For example, teams may ride together on an officer's duty shift, or mental health professionals may meet with the officer on-scene or respond by communicating from a remote location (Puntis et al., 2018). Some co-responder models also include behavioral health training for law enforcement personnel (Bailey et al., 2018). The underlying goal of co-responder models is to improve both law enforcement and mental health systems through collaboration (Rosenbaum, 2010).

- The co-responder model is associated with quicker and more appropriate responses than other types of law enforcement mental health response models (Kane, Evans, & Shokraneh, 2018).
- Mental health professionals on co-responder teams may have access to individuals' mental health histories and can tailor referrals to community health services (Reuland, 2010).
- Co-responder teams have been found to strengthen linkages between community services and those who need them and reducing burden on law enforcement personnel and organizations (Shapiro et al., 2015).

Considerations for Implementation:

- Key elements of PMHCs are strong collaborations between police and community health agencies (Schwartzfeld, Reuland, & Plotkin, 2008; Shapiro et al., 2015), a focus on addressing clients' basic needs (Braga, Piehl, & Hureau, 2009), and use of non-punitive actions (Wood & Watson, 2017).
- The success of PMHCs relies heavily on buy-in at multiple organizational levels in law enforcement including officers, commanders, and administrators (Reuland, 2004).
- Planning the implementations of a PMHC can be greatly assisted by the formation of an advocacy committee comprised of citizens, law enforcement, judicial representatives, and behavioral health professionals (Dupont, Cochran, & Pillsbury, 2007).
- Implementation of PMHCs requires time and commitment to establish effective collaborations and overcome organizational barriers between agencies (BJA, 2019).
- PMHCs require planning and addressing of challenges concerning the exchange of clients' mental health and criminal justice history information, including consideration of privacy laws such as HIPAA (Petrila, 2007).

Transitioning People from Incarceration to the Community: Process Models and Special Probation

What is it?

People with mental health and substance use disorders who are transitioning from jail or prison back into the community have a high risk for recidivism and relapse (Birmingham, 2003; Fazel & Yu, 2009; Lurigio, 2011). For some individuals, the transitional period can trigger the onset of disorders (Heilbrun et al., 2012). Efforts that support successful reentry for incarcerated individuals can improve health outcomes (Torrey et al., 2010) and reduce the burden on law enforcement services and the community (Fazel & Seewald, 2012).

Process models can guide strategic community planning to assess resources, identify gaps in services, and plan for successful transitions (Blue-Howells, Clark, Berk-Clark, & McGuire, 2013). The Sequential Intercept Model has been nationally promoted as a tool to improve access to mental health and substance use treatment for adults in contact with resources at six specific points in the criminal justice system (See Figure 1) (Munetz & Griffith, 2006). A multi-stakeholder planning group uses the model to understand how individuals flow through the criminal justice system, identify gaps and resources at each intercept, and develop action priorities to improve systems and services (PRA, 2018).

FIGURE 1: THE SEQUENTIAL INTERCEPT MODEL

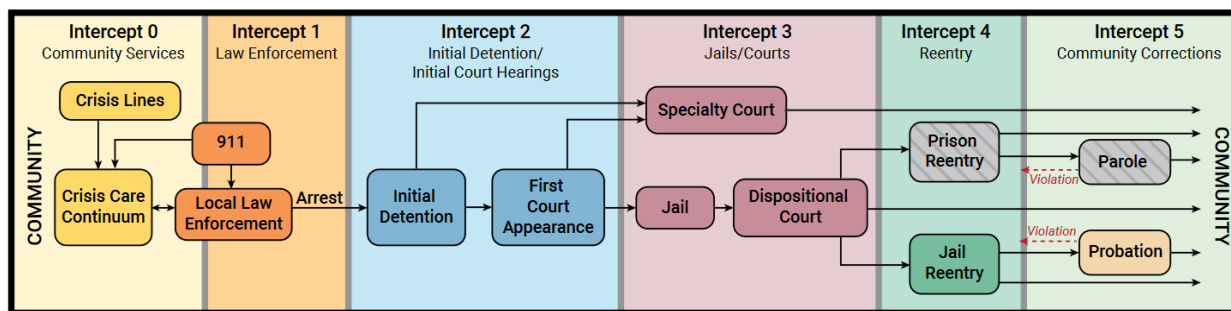


Figure 1: Source: Policy Research Associates (2018).

The APIC model (Assess, Plan, Identify, and Coordinate) directs behavioral health, justice, and community stakeholders to work across systems to implement programs that reduce risk and promote recovery for people with behavioral health disorders who are transitioning from jails/prisons back into the community (Osher, Steadman, & Barr, 2002):

- **Assess** the individual's clinical and social needs and public safety risk.
- **Plan** for the treatment and services required to address the individual's needs, both in custody and upon reentry.
- **Identify** required community and correctional programs responsible for post release services.
- **Coordinate** the transition plan to ensure implementation and avoid gaps in care with community-based services.

The APIC model was developed with support from SAMHSA's Gather, Assess, Integrate, Network, and Stimulate Center (GAINS) specifically to serve the needs of individuals experiencing co-occurring disorders in the justice system (Osher, Steadman, & Barr, 2002; SAMHSA, 2017).

Key Features and Benefits:

- The Sequential Intercept Model reduces traditionally complex and highly variable criminal justice processes into universal components, which aid in the planning and implementation of effective interventions (CMHS, 2009).
- The APIC model focuses on the individual level by meeting the behavioral health needs of offenders who are transitioning out of jail, and on the system level by ensuring collaboration and commitment to the transition process by community partners (Blandford & Osher, 2013).
- The APIC model is adaptable to short- (less than 72 hours) and long-term reentry strategies (Peters & Bekman, 2007), and can be used in conjunction within other criminal justice frameworks (Munetz & Griffin, 2006).

Considerations for Implementation:

- Conduct universal screening as early in the booking/intake process as possible and throughout the criminal justice continuum. For those who screen positively for mental health and/or substance use disorders, follow up with more comprehensive assessments to direct them to appropriate services.
- The first three months after being released into the community is the most critical window for influencing recidivism and behavioral health outcomes (CSG, 2005).
- All potential needs should be considered in the transition plan, including basic needs.
- Planning processes around the transitioning of individuals are most effective when developed by teams of stakeholders that cross multiple systems including mental health, substance use, public health, housing, social services, and family members (PRA, 2018).

Even when a post-release treatment plan includes mandated or voluntary treatment, mental health and substance use disorders make it difficult for individuals on probation to comply with court orders, putting them at risk for recidivism (Babchuk & Lurigio, 2012). People on probation respond positively to surveillance and services that encourage open communication, honesty, and problem-solving techniques rather than coercion (Skeem & Petrila, 2004). Specialty probation employs officers with mental health training who have lower caseload volume and communicate often with case managers and treatment providers (Petrilla & Redlich, 2008; DeMatteo, LaDuke, Locklair, & Heilbrun, 2013). Effective probation programs for persons with behavioral health disorders are characterized by therapeutic relationships between probationers and probation officers that emphasize shared decision making (Lurigio et al., 2012).

Special Considerations

Treatment in Jail and Detention Settings

People who are not successfully diverted from the criminal justice system or who require incarceration regardless represent an even more vulnerable subset of individuals with mental health and/or substance use disorders (Birmingham, 2003; Abram & Teplin, 1991). Not only is this population at increased risk for health consequences, they may also experience disproportionate legal consequences, such as longer sentences (O'Connor, Lovell, & Brown, 2002). Jails have a legal obligation to provide adequate mental health and substance use treatment for inmates (Steadman et al., 2009), yet the law does not provide a clear definition for what that treatment entails (Kosak, 2005). Additionally, there are significant institutional barriers to receiving treatment, such as the complications of dispensing medications in a controlled setting (Anno, 2001) and possible misalignment of treatment with court decisions and procedures (Lamb, Weinberger, & Gross, 2004).

Jail-based treatment has the potential to be beneficial in improving individuals' health and the operational conditions in jails by reducing mental health related behavioral disruptions (Steadman & Veysey, 1997), and to reduce recidivism (Dowden & Blanchette, 2002). The National Commission on Correctional Health Care offers publications on organizational and programmatic resources for a variety of mental health and substance use related disorders (NCCHC, 2019).

- The most consistent recommendation in jail-based treatment is effective screening for mental health and/or substance use disorders at intake into the jail (Martin, Colman, Simpson, & McKenzie, 2013). Given the high rate of co-occurring disorders, screening procedures and tools should target both mental health and substance use needs (Osher, Steadman, & Barr, 2003).
- Effective psychosocial therapies for inmates emphasize fostering effective social and living skills (O'Connor, Lovell, & Brown, 2002). Regarding substance use, programs that reduce personal and interpersonal supports for substance-oriented behavior and enhance alternatives to substance use are effective (Andrews et al., 2006).
- Treatment should not be associated with disciplinary actions (Krelstein, 2002).
- Special considerations should be taken to protect inmates receiving treatment from perceived stigma, such as isolating treatment sessions away from the general inmate population (Moore, Stuewig, & Tangney, 2013; O'Connor, Lovell, & Brown, 2002).
- The use of medication to assist in the treatment of substance use disorders (MAT) in jail settings is recommended as it significantly reduces post-release overdose deaths and relapse (Bird, Fischbacher, Graham, & Fraser, 2015). Additionally, great care should be taken to identify offenders entering the jail who are currently using MAT, to avoid abrupt cessation of treatment due to incarceration (Legal Action Center, 2015).
- Treatment plans should include an established post-release follow up schedule to prevent recidivism (Torrey et al., 2014).
- Positive collaborations between treatment and security staff should be promoted, as well as collaborations between community services and the jail (Osher, Steadman, & Barr, 2003).

Juvenile Justice

The majority of youth in the criminal justice system suffer from mental health and/or substance use disorders (Skowyra & Coccozza, 2007). Many youths are involved in criminal justice for relatively minor offenses (Skowyra & Powell, 2006) or enter the juvenile justice system in order to receive mental health services that they cannot afford access to elsewhere in the community (Waxman & Collins, 2004). Like with adult offenders, diversion of youth from juvenile criminal justice into community services is an ideal outcome (Skowyra & Powell, 2006). However, due to their unique developmental needs, treatment recommendations for youth differ from those of adults in important ways (Steinberg, Chung, & Little, 2004; Gagnon & Barber, 2010).

- Treatment, services, and procedures should reflect the developmental needs of youth and adolescents (Gagnon & Barber, 2010).
- Mental health and substance use screening of youth should occur as early as possible with all youth, regardless of indications of disorder, and employ standardized tools that have been developed for youth and adolescents (Skowyra & Coccozza, 2007; NCMHJJ, 2007).
- PMHCs and treatment involving juvenile justice should include family members and caregivers (Greenwood, 2008; Skowyra & Coccozza, 2007).
- Treatments for youth should be employed that are specific to gender, race and ethnicity, as the rates and types of disorders differ in juvenile detention settings (O'Connel, Boat, & Warner, 2009).
- Confidentiality or other protective policies should be established regarding mental health screening and assessments to protect youth from possible self-incrimination (Wasserman, et al., 2003).

References

- Abram, K. M., & Teplin, L. A. (1991). Co-occurring disorders among mentally ill jail detainees: implications for public policy. *American Psychologist*, 46(10), 1036.
- Andrews, D. A., Bonta, J., & Wormith, J. S. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency*, 52(1), 7-27.
- Anno, B. J. (2001). *Correctional Health Care: Guidelines for the Management of an Adequate Delivery System*, 2001 edition. Chicago, IL: *National Commission on Correctional Health Care*.
- Babchuk, L. C., & Lurigio, A. J. (2012). Responding to probationers with mental illness. *Fed. Probation*, 76, 41.
- Bailey, K., Paquet, S. R., Ray, B. R., Grommon, E., Lowder, E. M., & Sightes, E. (2018). Barriers and facilitators to implementing an urban co-responding police-mental health team. *Health & justice*, 6(1), 21.
- Baillargeon, J., Penn, J. V., Thomas, C. R., Temple, J. R., Baillargeon, G., & Murray, O. J. (2009). Psychiatric disorders and suicide in the nation's largest state prison system. *Journal of the American Academy of Psychiatry and the Law Online*, 37(2), 188-193.
- Beckett, K. (2014). Seattle's Law Enforcement Assisted Diversion Program: Lessons learned from the first two years. *Unpublished reported commissioned by the Ford Foundation*. Retrieved from: <https://www.fordfound.org/media/2543/2014-lead-process-evaluation.pdf>
- Bird, S. M., Fischbacher, C. M., Graham, L., & Fraser, A. (2015). Impact of opioid substitution therapy for Scotland's prisoners on drug-related deaths soon after prisoner release. *Addiction*, 110(10), 1617-1624.
- Birmingham, L. (2003). The mental health of prisoners. *Advances in psychiatric treatment*, 9(3), 191-199.
- Blandford, A. M., & Osher, F. (2013). *Guidelines for the successful transition of people with behavioral health disorders from jail and prison*. United States Substance Abuse and Mental Health Services Administration, GAINS Center for Behavioral Health and Justice Transformation.
- Blue-Howells, J. H., Clark, S. C., van den Berk-Clark, C., & McGuire, J. F. (2013). The US Department of Veterans Affairs Veterans Justice Programs and the sequential intercept model: Case examples in national dissemination of intervention for justice-involved veterans. *Psychological Services*, 10(1), 48.
- Braga, A. A., Piehl, A. M., & Hureau, D. (2009). Controlling violent offenders released to the community: An evaluation of the Boston Reentry Initiative. *Journal of Research in Crime and Delinquency*, 46(4), 411-436.
- Broner, N., Lattimore, P. K., Cowell, A. J., & Schlenger, W. E. (2004). Effects of diversion on adults with co-occurring mental illness and substance use: Outcomes from a national multi-site study. *Behavioral Sciences & the Law*, 22(4), 519-541.
- Center for Mental Health Services National GAINS Center [CMHS]. (2009). Developing a comprehensive plan for mental health and criminal justice collaboration: The Sequential Intercept Model. Delmar, NY: CMHS National GAINS Center. Retrieved from: https://www.criminaljustice.ny.gov/opca/pdfs/5-GAINS_Sequential_Intercept.pdf
- Clifasefi, S. L., Lonczak, H. S., & Collins, S. E. (2017). Seattle's Law Enforcement Assisted Diversion (LEAD) program: Within-subjects changes on housing, employment, and income/benefits outcomes and associations with recidivism. *Crime & Delinquency*, 63(4), 429-445.
- Collins, S. E., Lonczak, H. S., & Clifasefi, S. L. (2017). Seattle's Law Enforcement Assisted Diversion (LEAD): program effects on recidivism outcomes. *Evaluation and Program Planning*, 64, 49-56.
- Compton, M. T., Esterberg, M. L., McGee, R., Kotwicki, R. J., & Oliva, J. R. (2006). Crisis intervention team training: Changes in knowledge, attitudes, and stigma related to schizophrenia. *Psychiatric Services*, 57(8), 1199-1202.
- Council of State Governments & Re-entry Policy Council [CSG]. (2005). *Report of the re-entry policy council: Charting the safe and successful return of prisoners to the community*. Council of State Governments.
- DeMatteo, D., LaDuke, C., Locklair, B. R., & Heilbrun, K. (2013). Community-based alternatives for justice-involved individuals with severe mental illness: Diversion, problem-solving courts, and reentry. *Journal of Criminal Justice*, 41(2), 64-71.

- Dowden, C., & Blanchette, K. (2002). An evaluation of the effectiveness of substance abuse programming for female offenders. *International Journal of Offender Therapy and Comparative Criminology*, 46(2), 220-230.
- Dupont, R., Cochran, S., & Pillsbury, S. (2007). *Crisis intervention team core elements*. Memphis, TN: The University of Memphis School of Urban Affairs and Public Policy, Department of Criminology and Criminal Justice, CIT Center. Retrieved from <http://cit.memphis.edu/CoreElements.pdf>
- Fazel, S., Bains, P., & Doll, H. (2006). Substance abuse and dependence in prisoners: a systematic review. *Addiction*, 101(2), 181-191.
- Fazel, S., & Seewald, K. (2012). Severe mental illness in 33 588 prisoners worldwide: systematic review and meta-regression analysis. *The British Journal of Psychiatry*, 200(5), 364-373.
- Fazel, S., & Yu, R. (2009). Psychotic disorders and repeat offending: systematic review and meta-analysis. *Schizophrenia Bulletin*, 37(4), 800-810.
- Gagnon, J. C., & Barber, B. (2010). Characteristics of and services provided to youth in secure care facilities. *Behavioral Disorders*, 36(1), 7-19.
- Greenwood, P. (2008). Prevention and intervention programs for juvenile offenders. *The Future of Children*, 185-210.
- Hay, T. (2014). Mental health treatment for delinquent juveniles: A new model for law enforcement-based diversion. *Appalachian JL*, 14, 151.
- Heilbrun, K., DeMatteo, D., Yasuhara, K., Brooks-Holliday, S., Shah, S., King, C., ... & Laduke, C. (2012). Community-based alternatives for justice-involved individuals with severe mental illness: Review of the relevant research. *Criminal Justice and Behavior*, 39(4), 351-419.
- Kane, E., Evans, E., & Shokraneh, F. (2018). Effectiveness of current policing-related mental health interventions: A systematic review. *Criminal Behaviour and Mental Health*, 28(2), 108-119.
- Kosak, J. (2005). Comment: Mental health treatment and mistreatment in prisons. *Wm. Mitchell L. Rev.*, 32, 389.
- Krelstein, M. S. (2002). The role of mental health in the inmate disciplinary process: a national survey. *Journal of the American Academy of Psychiatry and the Law Online*, 30(4), 488-496.
- Lamb, H. R., Weinberger, L. E., & Gross, B. H. (2004). Mentally ill persons in the criminal justice system: Some perspectives. *Psychiatric Quarterly*, 75(2), 107-126.
- Legal Action Center. (2015). Confronting an epidemic: The case for eliminating barriers to medication-assisted treatment of heroin and opioid addiction. New York, NY: LAC. Retrieved from: <http://www.ncatod.org/wp-content/uploads/Confronting-an-Epidemic-MAT-2.pdf>
- Loveland, D., & Boyle, M. (2007). Intensive case management as a jail diversion program for people with a serious mental illness: a review of the literature. *International Journal of Offender Therapy and Comparative Criminology*, 51(2), 130-150.
- Lurigio, A. J. (2011). People with serious mental illness in the criminal justice system: causes, consequences, and correctives. *The Prison Journal*, 91(3_suppl), 66S-86S.
- Lurigio, A. J., Epperson, M. W., Canada, K. E., & Babchuk, L. C. (2012). Specialized probation programs for people with mental illnesses: a review of practices and research. *Journal of Crime and Justice*, 35(2), 317-326.
- Martin, M. S., Colman, I., Simpson, A. I., & McKenzie, K. (2013). Mental health screening tools in correctional institutions: a systematic review. *BMC Psychiatry*, 13(1), 275.
- McNiel, D. E., Binder, R. L., & Robinson, J. C. (2005). Incarceration associated with homelessness, mental disorder, and co-occurring substance abuse. *Psychiatric Services*, 56(7), 840-846.
- Moore, K., Stuewig, J., & Tangney, J. (2013). Jail inmates' perceived and anticipated stigma: Implications for post-release functioning. *Self and Identity*, 12(5), 527-547.
- Morabito, M. S., Kerr, A. N., Watson, A., Draine, J., Ottati, V., & Angell, B. (2012). Crisis intervention teams and people with mental illness: Exploring the factors that influence the use of force. *Crime & delinquency*, 58(1), 57-77.
- Munetz, M. R., & Griffin, P. A. (2006). Use of the sequential intercept model as an approach to decriminalization of people with serious mental illness. *Psychiatric Services*, 57(4), 544-549.

- Naples, M., & Steadman, H. J. (2003). Can persons with co-occurring disorders and violent charges be successfully diverted? *International Journal of Forensic Mental Health*, 2(2), 137-143.
- National Center for Mental Health and Juvenile Justice [NCMHJJ]. (2007). Mental Health Screening within Juvenile Justice: The Next Frontier. Retrieved from: http://www.modelsforchange.net/publications/198/Mental_Health_Screening_within_Juvenile_Justice_The_Next_Frontier.pdf
- National Commission on Correctional Health Care [NCCHC]. (2019). NCCHC offers the best publications in correctional health care. Retrieved from: <https://www.ncchc.org/publications>
- National Research Council. (2014). The Growth of Incarceration in the United States: Exploring Causes and Consequences. Committee on Causes and Consequences of High Rates of Incarceration, J. Travis, B. Western, and S. Redburn, Editors. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press
- O'Connell, M. E., Boat, T., & Warner, K. E. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities* (Vol. 7). Washington, DC: National Academies Press.
- O'Connor, F. W., Lovell, D., & Brown, L. (2002). Implementing residential treatment for prison inmates with mental illness. *Archives of Psychiatric Nursing*, 16(5), 232-238.
- Osher, F., Steadman, H. J., & Barr, H. (2003). A best practice approach to community reentry from jails for inmates with co-occurring disorders: The APIC model. *Crime & Delinquency*, 49(1), 79-96.
- Peters, R. H., & Bekman, N. M. (2007). Treatment and reentry approaches for offenders with co-occurring disorders. In *Public Health Behind Bars* (pp. 368-384). Springer, New York, NY.
- Petrila, J. P., & Redlich, A. D. (2008). Mental illness and the courts: Some reflections on judges as innovators. *Court Review*, 43(4), 154-64.
- Petrila, J. (2007). Dispelling the myths about information sharing between the mental health and criminal justice systems. *CMHS National GAINS Center for Systemic Change for Justice-Involved People with Mental Illness*. Tampa, FL: Department of Mental Health Law & Policy, University of South Florida.
- Policy Research Associates [PRA]. (2018). The Sequential Intercept Model: Advancing Community-Based Solutions for Justice-Involved People with Mental and Substance Use Disorders. Retrieved from: <https://www.prainc.com/wp-content/uploads/2018/06/PRA-SIM-Letter-Paper-2018.pdf>
- Prins, S. J., & Draper, L. (2009). *Improving outcomes for people with mental illnesses under community corrections supervision: A guide to research-informed policy and practice*. Justice Center, Council of State Governments.
- Puntis, S., Perfect, D., Kirubakaran, A., Bolton, S., Davies, F., Hayes, A., ... & Molodynski, A. (2018). A systematic review of co-responder models of police mental health 'street' triage. *BMC Psychiatry*, 18(1), 256.
- Reuland, M. (2004). *A guide to implementing police-based diversion programs for people with mental illness*. Delmar, NY: Technical Assistance and Policy Analysis Center for Jail Diversion.
- Reuland, M. (2010). Tailoring the police response to people with mental illness to community characteristics in the USA. *Police Practice and Research: An International Journal*, 11(4), 315-329.
- Rosenbaum, N. (2010). Street-level psychiatry—A psychiatrist's role with the Albuquerque police department's crisis outreach and support team. *Journal of Police Crisis Negotiations*, 10(1-2), 175-181.
- Shapiro, G. K., Cusi, A., Kirst, M., O'Campo, P., Nakhost, A., & Stergiopoulos, V. (2015). Co-responding police-mental health programs: a review. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 606-620.
- Schwartzfeld, M., Reuland, M. M., & Plotkin, M. R. (2008). *Improving responses to people with mental illnesses: The essential elements of a specialized law enforcement-based program*. Justice Center, the Council of State Governments.
- Skeem, J. L., & Petrila, J. (2004). Problem-solving supervision: Specialty probation for individuals with mental illness. *Court Review*, 40(4), 8.
- Skowrya, K. R., & Coccozza, J. J. (2007). Blueprint for change: A comprehensive model for the identification and treatment of youth with mental health needs in contact with the juvenile justice system. *Policy Research Associates, Inc.* Retrieved from: <https://www.ncmhjj.com/wp-content/uploads/2013/12/Blueprint.pdf>

- Skowrya, K., & Powell, S. D. (2006). Juvenile diversion: Programs for justice-involved youth with mental health disorders. Delmar, NY: National Center for Mental Health and Juvenile Justice.
- Steadman, H. J., Deane, M. W., Borum, R., & Morrissey, J. P. (2000). Comparing outcomes of major models of police responses to mental health emergencies. *Psychiatric Services*, 51(5), 645-649.
- Steadman, H. J., Osher, F. C., Robbins, P. C., Case, B., & Samuels, S. (2009). Prevalence of serious mental illness among jail inmates. *Psychiatric Services*, 60(6), 761-765.
- Steadman, H., Stainbrook, K., Griffin, P., Draine, J., Dupont, R., & Horey, C. (2001). The need for a specialized crisis response location for effective police-based diversion programs. *Psychiatric Services*, 52, 219-222.
- Steadman, H. J., & Veysey, B. M. (1997). *Providing services for jail inmates with mental disorders*. Washington, DC: US Department of Justice, Office of Justice Programs, National Institute of Justice.
- Steinberg, L., Chung, H. L., & Little, M. (2004). Reentry of young offenders from the justice system: A developmental perspective. *Youth violence and juvenile justice*, 2(1), 21-38.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2017). Guidelines for Successful Transition of People with Mental or Substance Use Disorders from Jail and Prison: Implementation Guide. (SMA)-16-4998. Rockville, MD: Substance Abuse and Mental Health Services Administration
- Teller, J. L., Munetz, M. R., Gil, K. M., & Ritter, C. (2006). Crisis intervention team training for police officers responding to mental disturbance calls. *Psychiatric Services*, 57(2), 232-237.
- Torrey, E. F., Kennard, A. D., Eslinger, D., Lamb, R., & Pavle, J. (2010). More mentally ill persons are in jails and prisons than hospitals: A survey of the states. Arlington, VA: Treatment Advocacy Center.
- Torrey, E. F., Zdanowicz, M. T., Kennard, A. D., Lamb, H. R., Eslinger, D. F., Biasotti, M. C., & Fuller, D. A. (2014). The treatment of persons with mental illness in prisons and jails: A state survey. *Treatment Advocacy Center*.
- Usher, L., Watson, A.C., Bruno, R., Andriukaitis, S., Kamin, D., Speed, C. & Taylor, S. (2019). Crisis Intervention Team (CIT) Programs: A Best Practice Guide for Transforming Community Responses to Mental Health Crises. Memphis: CIT International. Retrieved from: [http://www.citinternational.org/resources/Best%20Practice%20Guide/CIT%20guide%20desktop%20printing%202019_08_16%20\(1\).pdf](http://www.citinternational.org/resources/Best%20Practice%20Guide/CIT%20guide%20desktop%20printing%202019_08_16%20(1).pdf)
- U.S. Department of Justice, Bureau of Justice Assistance [BJA]. (n.d.). Police-Mental Health Collaboration Toolkit. Retrieved from <https://pmhctoolkit.bja.gov/home>
- U.S. Department of Justice, Bureau of Justice Assistance [BJA]. (2019). Police-Mental Health Collaborations A Framework for Implementing Effective Law Enforcement Responses for People Who Have Mental Health Needs. Retrieved from: <https://csgjusticecenter.org/wp-content/uploads/2019/04/Police-Mental-Health-Collaborations-Framework.pdf>
- Warner, T. D., & Kramer, J. H. (2009). Closing the revolving door? substance abuse treatment as an alternative to traditional sentencing for drug-dependent offenders. *Criminal Justice and Behavior*, 36(1), 89-109.
- Wasserman, G. A., Jensen, P. S., Ko, S. J., Cocozza, J., Trupin, E., Angold, A., ... & Grisso, T. (2003). Mental health assessments in juvenile justice: report on the consensus conference. *Journal of the American Academy of Child & Adolescent Psychiatry*, 42(7), 752-761.
- Watson, A. C., & Fulambarker, A. J. (2012). The crisis intervention team model of police response to mental health crises: a primer for mental health practitioners. *Best practices in Mental Health*, 8(2), 71.
- Waxman, H. A., & Collins, S. (2004). *Incarceration of youth who are waiting for community mental health services in the United States*. US House of Representatives, Committee on Government Reform.
- Wells, W., & Schafer, J. A. (2006). Officer perceptions of police responses to persons with a mental illness. *Policing: An International Journal of Police Strategies & Management*, 29(4), 578-601.
- Wood, J. D., & Watson, A. C. (2017). Improving police interventions during mental health-related encounters: past, present and future. *Policing and Society*, 27(3), 289-299.

Cross-Systems Considerations and Conclusions

Mental health and substance use disorders commonly co-occur, are multi-factorial in their causes, and must be addressed across a range of treatment settings. Thus, in addition to considering best practices for providing treatment for mental health and substance use disorders in distinct settings (e.g., primary care and hospitals, schools, colleges and universities, direct treatment, and law enforcement and jails), it is helpful to consider best practices and guidance that commonly benefit multiple settings and situations. As summarized below, these include broader considerations for: the implementation of evidence-based practices; reducing stigma for individuals with mental health and substance use issues needing and receiving treatment; and addressing the cultural needs of individuals from different backgrounds when providing treatment.

Selecting and Implementing Evidence-Based Practices

A consistent recommendation in the mental health and substance use health literature across treatment delivery settings is the implementation of interventions that have been rigorously tested and supported by evidence (Charif, 2017; Langley et al., 2010; Glasner-Edwards & Rawson, 2010; Blandford & Osher, 2012). However, service providers often struggle with how to carry out this recommendation (Aarons & Palinkas, 2007; Wolff et al., 2013). Research has documented a host of barriers to implementation such as budget cuts, staff turnover and lack of buy-in, competing organizational goals, and other aspects related to capacity (Forman et al., 2009; Roman, Abraham, & Knudsen, 2011; Welsh & Harris, 2016). Evidence-based practices for given settings are outlined more extensively in the previous sections, but the following broad recommendations should be considered for effective implementation of evidence-based practices across settings:

1. **Interventions should be selected that are developmentally appropriate and have core components that consider multiple ecologies and risk factors** (Flay, 2007). For example, an evidence-based substance use treatment intervention delivered in a school setting should be tailored for specific age range or grade level, involve some interaction with parents or family caregivers, and incorporate a mental health component that targets mental health risk factors known to be associated with the targeted substance. Setting-specific criteria for a school-based intervention might include that it is interactive rather than didactic, and delivered by teachers and/or same age or slightly older peers, both factors known to add to the effectiveness of school-based mental health and substance use interventions (Sloboda, 2009).
2. **Interventions should be tailored to fit, but with a consideration for maintaining fidelity of implementation** (Carroll et al., 2007). Interventions are rarely if ever tested for applicability with different populations, necessitating their adaptation to be effective (Castro, Barrera, & Martinez, 2004). Adaptations to interventions include meeting the specific organizational parameters of treatment delivery setting, local context, or the unique needs of a diverse client base (Blakely et al., 1987; Gotham, 2004). A school-based intervention may need to be adapted by adding socio-emotional learning elements to its core curriculum, modifying its implementation dosage to work with students' academic schedules, and language translation of materials intended to reach family of origin caregivers. While adaptations should be considered for effective implementation, fidelity to original key design elements remains important for interventions to be effective (Carroll et al., 2007). Fidelity can be

achieved by identifying and adhering to the essential elements and goals of the intervention (Vicary & Karshin, 2002) and consistent monitoring for desired (or undesired) treatment outcomes (Carroll et al., 2007). The establishment of ongoing technical assistance and comprehensive training of intervention facilitators can help to ensure consistent outcomes (Elliott & Mihalic, 2004).

3. **The use of professional “practice facilitators” should be considered to help organizations develop capacity for and address challenges in implementing evidence-based practices within health care settings** (Knox et al., 2011). Practice facilitation includes activities such as auditing with feedback, consensus building, goal setting, and implementing quality improvement tools (e.g., logic models). Practice facilitation has been found to increase preventive service delivery rates, assist with chronic disease management, and support system-level improvements within health care settings (Nagykaldi, Mold, & Aspy, 2005).

Reducing Stigma

Stigma, prejudice, and discrimination directed towards individuals experiencing mental health and/or substance use disorders are significant barriers to their access, engagement, and success with treatment and recovery (Barry, McGinty, Pescosolido, & Goldman, 2014). Stigma permeates throughout society and even trained clinicians are not immune to perpetuating biases that can lead to poor treatment outcomes (Kelly & Westerhoff, 2010). Policy makers and administrators must realize that changing beliefs and norms that are reinforced on a community and societal level is daunting, and interventions are likely to not make immediate or even lasting impacts (NASEM, 2016). However, there are strategies that can increase patients’ seeking, and accessing treatment for mental health and/or substance use disorders. The following areas should be considered for reducing stigma:

1. **Educational campaigns can disseminate factual information about disorders and counter negative beliefs and misinformation** (Griffiths, Carron-Arthur, Parsons, & Reid, 2014). Campaigns can be designed for small- and large-scale settings and target the reduction of both public and individual stigma (Cook, Purdie-Vaughns, Meyer, & Busch 2014).
2. **Positive interactions between people with and without mental health and/or substance use disorders can reduce stigma and promote prolonged and needed treatment** (Corrigan, Kosyluk, & Rüsch, 2013; Solomon, 2004). People belonging to stigmatized groups tend to have reduced meaningful contact with people who are not experiencing health disorders (Cook et al., 2014). One way to facilitate contact between groups is by enlisting peer service providers who have lived experience with health disorders (NASEM, 2016). Peer support helps keep patients in treatment longer (Solomon, 2004).
3. **Use of person-first versus disorder-first language communicates that people are not defined by their disease** (White House Office of National Drug Control Policy, 2016). Individuals should not be definitively characterized by the mental health and/or substance use disorders they are experiencing (APA, 2019) but rather recognized as whole, multi-faceted individuals. The American Medical Association, American Society of Addiction Medicine, and the International Society of Addiction Journal Editors have called for treatment providers to adopt language that avoids stigmatization and the proliferation of discriminatory practices (AMA, 2018; ASAM, 2015; ISAJE, 2015). Examples of terms specific to substance use treatment settings and the rationale behind their use are provided in the table below.

TABLE 1. PREFERRED ANTI-STIGMATIZING TERMINOLOGY IN SUBSTANCE USE TREATMENT SETTINGS

Commonly used term	Preferred term	Rationale
Addict, abuser, junkie, etc.	Person with a substance use disorder	Focuses on respect, dignity and primacy of personhood
Substance abuse	Substance use disorder Hazardous, risky, or unhealthy use	Avoids implication of willful misconduct; also shift in emphasis to chronic disease model
Opioid substitution therapy, replacement therapy	Opioid agonist treatment	Avoids implication of “switching addiction” Pharmacologic classification is more in line with other medications
Clean	Sober / abstinent	Avoids value-laden, non-clinical terminology
Dirty / clean urine	Positive or negative urine drug screen	Avoids value-laden, non-clinical terminology
Medication Assisted Treatment (MAT)	Treatment / recovery	Avoids ostracizing the treatment of addiction through medication from other types of health care that also utilize medication

Table adapted from Marcovitz (2019).

Cultural Sensitivity/Competence

The use of community mental health and substance use disorder services by ethnic and racial minority groups has traditionally been characterized by both underutilization (i.e., needs not being met) and overutilization (i.e., groups receiving more severe diagnoses) (Griner & Smith, 2006; Breau & Ryujin, 1999). In order to address these disparities, mental health and substance use disorder services must foster “the ability to honor and respect the beliefs, languages, interpersonal styles, and behaviors of individuals and families receiving services, as well as staff members who are providing such services” (SAMHSA, 2014). Cultural competency is needed to improve individuals’ engagement in services, relationships between providers and clients, and individual and community health outcomes (SAMHSA, 2014). Culturally aware/sensitive treatment should consider the following guidelines:

1. **Cultural competency in treatment settings should attempt to be as culturally specific as possible to address the diversity of people from different ethnic and racial groups and their needs.** Meeting the needs of a large variety of groups can be impractical, especially in settings where resources are scarce (Bhui et al., 2007; Miranda, Nakamura, & Bernal, 2003). Focusing on the creation process, rather than the content of organizational guidelines is an effective method for serving a diverse client base (Lopez, Kopelowicz, & Canive, 2002). For instance, emphasizing collaborative communication in a diverse stakeholder meeting may help to illuminate needs and solutions better than pursuing prescriptive objectives. Guidelines should be regularly evaluated for their efficacy and appropriateness by culturally diverse staff and administrators (USDHHS, 2003).
2. **Educational trainings should be implemented that instill knowledge and skills for addressing the needs of diverse clientele.** There should also be ongoing evaluation of providers' values, assumptions and biases regarding cultural groups and how they affect the services they provide (Campinha-Bacote, 2002). Cultural beliefs, traditions, and practices change over time and treatment practices should be continually evaluated to ensure they are keeping up (Zuckerman, 1990).
3. **Culturally appropriate screening and assessment tools should be used that have been adapted for other languages and validated for particular populations,** and/or the use of an interpreter should be employed (Castro, Barrera, & Martinez, 2004). Treatment plans should promote strength-based strategies that incorporate clients' cultural beliefs and health preferences (SAMHSA, 2014).
4. **Treatment should recognize that individuals may differ in the way they interact with and recover from substances as a function of their cultural backgrounds, socioeconomic status, age, and other social identity characteristics** (SAMHSA, 2014). Assessment of treatment efficacy should consider that recovery may look different for different people.

Conclusion

This review has highlighted best practices for effectively treating mental health and substance use disorders across five different treatment delivery settings. The costs of mental health and substance use disorders to individuals and communities are well documented, as is the pervasive impact of these disorders across the many facets of an individual's life over time. The response of community health services must be equally multifaceted with the integration of and/or collaboration between organizations and settings. These practice recommendations come from peer-reviewed behavioral health literature and other professional health agency sources. Best practices should be considered at the forefront when implementing treatment programs, while also recognizing that new and innovative strategies, community-level adaptations, and approaches to inter-agency partnerships and may be necessary to meet the unique needs of each patient and community.

References

- Aarons, G. A., & Palinkas, L. A. (2007). Implementation of evidence-based practice in child welfare: Service provider perspectives. *Administration and Policy in Mental Health and Mental Health Services Research*, 34(4), 411-419.
- American Medical Association [AMA]. (2018). 4 factors that add to stigma surrounding opioid-use disorder. Retrieved from: <https://www.ama-assn.org/delivering-care/opioids/4-factors-add-stigma-surrounding-opioid-use-disorder>
- American Psychiatric Association [APA] (2019). Words Matter: Reporting on Mental Health Conditions. Retrieved from: <https://www.psychiatry.org/newsroom/reporting-on-mental-health-conditions>
- American Society of Addiction Medicine [ASAM]. (2015). Patients with addiction need treatment – not stigma. Retrieved from: <http://www.asam.org/magazine/read/article/2015/12/15/patients-with-a-substance-use-disorder-need-treatment---not-stigma>
- Barry, C. L., McGinty, E. E., Pescosolido, B. A., & Goldman, H. H. (2014). Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. *Psychiatric Services*, 65(10), 1269-1272.
- Bhui, K., Warfa, N., Edonya, P., McKenzie, K., & Bhugra, D. (2007). Cultural competence in mental health care: a review of model evaluations. *BMC Health Services Research*, 7(1), 15.
- Blakely, C. H., Mayer, J. P., Gottschalk, R. G., Schmitt, N., Davidson, W. S., Roitman, D. B., & Emshoff, J. G. (1987). The fidelity-adaptation debate: Implications for the implementation of public sector social programs. *American Journal of Community Psychology*, 15(3), 253-268.
- Blandford, A. M., Osher, F. C., & SAMHSA's GAINS Ctr. (2012). A checklist for implementing evidence-based practices and programs for justice-involved adults with behavioral health disorders. *Substance Abuse and Mental Health Services Administration GAINS Center*.
- Breaux, C., & Ryujin, D. (1999). Use of mental health services by ethnically diverse groups within the United States. *The Clinical Psychologist*, 52(3), 4-15.
- Campinha-Bacote, J. (2002). The process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing*, 13(3), 181-184.
- Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation Science*, 2(1), 40.
- Castro, F. G., Barrera, M., & Martinez, C. R. (2004). The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. *Prevention Science*, 5(1), 41-45.
- Charif, A. B., Zomahoun, H. T. V., LeBlanc, A., Langlois, L., Wolfenden, L., Yoong, S. L., ... & Legare, F. (2017). Effective strategies for scaling up evidence-based practices in primary care: a systematic review. *Implementation Science*, 12(1), 139.
- Cook, J. E., Purdie-Vaughns, V., Meyer, I. H., & Busch, J. T. (2014). Intervening within and across levels: A multilevel approach to stigma and public health. *Social Science & Medicine*, 103, 101-109.
- Corrigan, P. W., Kosyluk, K. A., & Rüsch, N. (2013). Reducing self-stigma by coming out proud. *American Journal of Public Health*, 103(5), 794-800.
- Elliott, D. S., & Mihalic, S. (2004). Issues in disseminating and replicating effective prevention programs. *Prevention Science*, 5(1), 47-53.
- Flay, B. R. (2007). The long-term promise of effective school-based smoking prevention programs. *Ending the tobacco problem: A blueprint for the nation*, 449, e77.
- Forman, S. G., Olin, S. S., Hoagwood, K. E., Crowe, M., & Saka, N. (2009). Evidence-based interventions in schools: Developers' views of implementation barriers and facilitators. *School Mental Health*, 1(1), 26.
- Glasner-Edwards, S., & Rawson, R. (2010). Evidence-based practices in addiction treatment: Review and recommendations for public policy. *Health Policy*, 97(2-3), 93-104.
- Gotham, H. J. (2004). Diffusion of mental health and substance abuse treatments: Development, dissemination, and implementation. *Clinical Psychology: Science and Practice*, 11(2), 160-176.

- Griffiths, K. M., Carron-Arthur, B., Parsons, A., & Reid, R. (2014). Effectiveness of programs for reducing the stigma associated with mental disorders. A meta-analysis of randomized controlled trials. *World Psychiatry*, 13(2), 161-175.
- Griner, D., & Smith, T. B. (2006). Culturally adapted mental health intervention: A meta-analytic review. *Psychotherapy: Theory, Research, Practice, Training*, 43(4), 531.
- International Society of Addiction Journal Editors [ISAJE]. (2015). Addiction terminology statement. Retrieved from: <http://www.parint.org/isajewebsite/terminology.htm>
- Kelly, J. F., & Westerhoff, C. M. (2010). Does it matter how we refer to individuals with substance-related conditions? A randomized study of two commonly used terms. *International Journal of Drug Policy*, 21(3), 202-207.
- Knox, L., Taylor, E. F., Geonnotti, K., Machta, R., Kim, J., Nysenbaum, J., & Parchman, M. (2011). *Developing and Running a Primary Care Practice Facilitation Program A How To Guide* (No. cf15b9115d714275b538a9c835145652). Mathematica Policy Research.
- Langley, A. K., Nadeem, E., Kataoka, S. H., Stein, B. D., & Jaycox, L. H. (2010). Evidence-based mental health programs in schools: Barriers and facilitators of successful implementation. *School Mental Health*, 2(3), 105-113.
- Lopez, S. R., Kopelowicz, A., & Canive, J. M. (2002). Strategies in developing culturally congruent family interventions for schizophrenia: The case of Hispanics. *Family interventions in mental illness: International perspectives*, 61-90.
- Marcovitz, D. (2019). SAMHSA Bringing Recovery Supports to Scale Technical Assistance Center Strategy Living Proof Series Neurobiology of Opioid Use Disorder and Medication for Opioid Use Disorder: Implications for Co-occurring Disorders [Webinar].
- Miranda, J., Nakamura, R., & Bernal, G. (2003). Including ethnic minorities in mental health intervention research: A practical approach to a long-standing problem. *Culture, Medicine and Psychiatry*, 27(4), 467-486.
- Nagykaldi, Z., Mold, J. W., & Aspy, C. B. (2005). Practice facilitators: a review of the literature. *Family Medicine-Kansas City*, 37(8), 581.
- National Academies of Sciences, Engineering, and Medicine [NASEM]. (2016). *Ending discrimination against people with mental and substance use disorders: The evidence for stigma change*. National Academies Press.
- Roman, P. M., Abraham, A. J., & Knudsen, H. K. (2011). Using medication-assisted treatment for substance use disorders: Evidence of barriers and facilitators of implementation. *Addictive Behaviors*, 36(6), 584-589.
- Sloboda, Z. (2009). School prevention. In *Adolescent Substance Abuse* (pp. 191-212). Springer, Boston, MA.
- Solomon, P. (2004). Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal*, 27(4), 392.
- Substance Abuse and Mental Health Services Administration. (2014). Improving Cultural Competence. Treatment Improvement Protocol (TIP) Series No. 59. HHS Publication No. (SMA) 14-4849. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- U.S. Department of Health and Human Services [HHS]. (2003). Developing cultural competence in disaster mental health programs: Guiding principles and recommendations (DHHS Pub. No. SMA 3828). Rockville, MD: Center for Mental Health Services. *Substance Abuse and Mental Health Services Administration*.
- Vicary, J. R., & Karshin, C. M. (2002). College alcohol abuse: A review of the problems, issues, and prevention approaches. *Journal of Primary Prevention*, 22(3), 299-331.
- Welsh, W. N., & Harris, P. W. (2016). *Criminal justice policy and planning: Planned change*. Routledge.
- White House Office of National Drug Control Policy. (2016). *Changing the Language of Addiction*. Washington, DC: White House Office of National Drug Control Policy; 2016. Retrieved from: <https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Memo%20-%20Changing%20Federal%20Terminology%20Regrading%20Substance%20Use%20and%20Substance%20Use%20Disorders.pdf>
- Wolff, N., Frueh, B. C., Huening, J., Shi, J., Epperson, M. W., Morgan, R., & Fisher, W. (2013). Practice informs the next generation of behavioral health and criminal justice interventions. *International Journal of Law and Psychiatry*, 36(1), 1-10.
- Zuckerman, M. (1990). Some dubious premises in research and theory on racial differences: Scientific, social, and ethical issues. *American Psychologist*, 45(12), 1297.