



Complementary and Alternative Psychotherapeutic Modalities for the Treatment of Behavioral and Substance Use Disorders

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Instructions for Use

Instructions for Use

This Behavioral Health Policy is used to make coverage determinations for behavioral health services in accordance with the member-specific health benefit plan document (e.g., Evidence of Coverage) and applicable federal and state laws.

All reviewers must first confirm member eligibility and identify the member-specific benefit plan document, and any applicable federal or state law(s) governing benefit coverage prior to using this Policy. In the event of a conflict between this Policy and the member-specific benefit plan document, the member-specific benefit plan document governs. In the event of conflict between the member-specific health benefit plan document and applicable law, the applicable law governs.

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Description of Service

Complementary and Alternative Medicine (CAM) Psychotherapeutic Modalities for the Treatment of Behavioral and Substance Use Disorders

According to the National Center for Complementary and Integrative Health (NCCIH, 2026), treatments that are “complementary” or “alternative” represent approaches developed outside of mainstream Western, or conventional, medicine. These terms are often used interchangeably, but refer to different concepts:

- If a non-mainstream practice is used together with conventional medicine, it is considered “complementary;”
- If a non-mainstream practice is used in place of conventional medicine, it is considered “alternative.”

Animal-Assisted Therapy

According to the Association of Animal-Assisted Intervention Professionals (AAAIP, 2025), animal-assisted interventions consist of objective goals with structured interventions that integrate animals in health, education, and human service for a therapeutic role in improved health and wellness. While dogs are the most common animal utilized, a variety of animals and species can provide animal-assisted interventions.

Art Therapy

According to the American Art Therapy Association (AATA, 2022), art therapy combines the knowledge and understanding of human development and psychological theories/techniques with visual arts and the creative process. Art therapists incorporate the use of art media and verbal processing of produced imagery to help clients communicate beyond verbal expression.

Dance/Movement Therapy (DMT)

DMT is defined as the psychotherapeutic use of movement to further the emotional, cognitive, physical, and social integration of the individual (American Dance Therapy Association [ADTA], 2020). Dance/movement therapy interventions apply affective, behavioral, motoric, cognitive, and systemic strategies, including the principles of development, wellness, and pathology. The use of specific methods, techniques, modalities, and verbal interventions within the practice of professional dance/movement therapy is restricted to professional dance/movement therapists appropriately trained in the use of such methods, techniques, or modalities. Dance/movement therapy may be identified by other terms in the research literature, including “dance movement psychotherapy,” “dance therapy,” “body psychotherapy,” or “therapeutic movement.”

Equine Therapy

Equine therapy uses the purposeful manipulation of equine movement to engage sensory, neuromotor, and cognitive systems in achieving functional outcomes (American Hippotherapy Association, 2026). Equine therapy can be conducted by physical therapists or occupational therapists as part of a larger plan of care involving other neuro/sensorimotor techniques. Individual riding centers may also employ “certified path instructors” or “horsemanship instructors.” Equine therapy is identified by other terms in the research literature, including “hippotherapy,” “therapeutic horseback riding,” “horse therapy,” “therapeutic horsemanship,” and “equine-assisted therapy.” Behavioral health conditions for which riding centers promote their services include autism spectrum disorders, attention deficit hyperactivity disorder, post-traumatic stress disorder, and learning disability.

Music Therapy

Music therapy is the clinical use of music interventions to accomplish individualized goals within a therapeutic relationship and is typically conducted by an individual completing an approved music therapy program. Therapists may assess emotional well-being and social functioning through musical responses and develop music sessions based on specific client needs. According to the American Music Therapy Association (AMTA, 2026), music therapy allows exploration of personal feelings and promotes positive changes in mood and emotional states.

Coverage Rationale

Complementary and alternative psychotherapeutic modalities are investigational for treating behavioral and substance use disorders:

- Animal-Assisted Therapy
- Art Therapy
- Dance/Movement Therapy
- Equine Therapy
- Music Therapy

Clinical Evidence

Summary of Clinical Evidence

Animal-Assisted Therapy

According to an UpToDate review (Hale & Harris, 2026), further empirical investigation is warranted before animal-assisted therapy or hippotherapy can be formally endorsed as a recommended intervention autism spectrum disorder.

Hernandez-Espeso et al. (2026) conducted a systematic review evaluating animal-assisted therapy (AAT), including equine-assisted interventions, for the primary outcome of anxiety reduction in vulnerable clinical populations. Included studies (sample sizes 10–334) encompassed both pediatric and adult populations with diverse behavioral health conditions, most commonly PTSD, as well as severe mental illness, dementia, trauma exposure, and substance use disorders. Interventions primarily involved dogs and horses and consisted of activities such as petting, grooming, feeding, walking, play, horseback riding, stable care, and provision of emotional support during medical procedures. Comparator conditions included usual care, structured control activities, and psychotherapies such as CBT. Intervention duration varied widely (1–48 weeks), and outcomes were most frequently measured using validated tools such as the State–Trait Anxiety Inventory (STAI) and PTSD Checklist (PCL). Across seven RCTs, AAT primary outcomes demonstrated significant reductions in anxiety compared with control conditions, while pre–post studies also showed within-group symptom improvements; however, numerical effect sizes were not reported, and follow-up data were inconsistent. Interpretation is limited by substantial heterogeneity in populations, intervention protocols, and outcome measures, small sample sizes, lack of adequate control groups in some studies, absence of pooled effect estimates, and inability to isolate AAT-specific effects or determine optimal treatment parameters. Overall, the authors of this review report that AAT appears promising for short-term anxiety reduction, but standardized protocols and evidence regarding long-term effectiveness remain insufficient, warranting further rigorous research to clarify mechanisms, dose-response relationships, and integration into multidisciplinary care.

Pandey et al. (2024) conducted a review of qualitative and quantitative evidence examining the impact of animal-assisted therapy (AAT) on individuals with psychiatric and neurological disorders. The review included 16 studies, with sample sizes ranging from 6 to 150 participants, aged 7 to 75 years. All interventions involved dog-assisted therapy. Primary outcomes measured included mental health, social functioning, and overall quality of life. Four comparative studies found AAT to be as effective or more effective than established interventions. Some studies observed consistent psychological improvements for children, young adults, and older adults. However, some outcome measures showed no significant effects, particularly in relation to psychiatric symptoms, stress, anxiety, and neurological disorders. Key limitations included small sample sizes, short intervention durations, lack of rigorous study designs, absence of follow-up assessments, and inadequate outcome measures. The authors concluded that while preliminary findings are promising, further research is needed to establish the efficacy and clinical utility of AAT.

Rehn and colleagues (2023) completed systematic review on the efficacy of animal-assisted therapy for children and adolescents with autism spectrum disorder (ASD). Seven randomized controlled trials with moderate quality were included in this review. Participants were children and adolescents ages 2–16 years, of all genders and with a formal diagnosis of ASD, including Asperger's Syndrome or Pervasive Developmental Disorder. The sample sizes of the studies ranged from 8 to 37 with more male participants than females. The study interventions included equine-based therapy, dolphin-assisted therapy, and canine-assisted therapy. Intervention details include mounted and unmounted activities for equine-based therapy, swimming with dolphins, and caring for a dog. Frequency and duration of the interventions varied from once or twice per week for 7 weeks up to 4 months. The primary outcome results across the studies showed positive

results in the domains of cognitive (3 studies), social (5 studies), emotional (2 studies), behavioural (3 studies), and physical domains (2 studies). Limitations of the studies include variation in the delivery of AAT with heterogeneity detected regarding the variability of the trainers, intervention periods, frequency, and intervention intensity. Additional limitations include small sample sizes with a majority of male participants. The authors of this review recommend future research to include more female participants, larger sample sizes, and details regarding ASD severity.

Chen and colleagues (2022) completed a systematic review and meta-analysis to investigate the efficacy of animal-assisted therapy (AAT) for individuals diagnosed with dementia. Included in the review are 11 randomized controlled trials (RCTs) with 825 participants; sample sizes ranged from 16 - 334. The most common therapeutic animals utilized in the studies were dogs. Intervention details widely varied from petting a dog, playing fetch with a dog, to grooming a horse. Intervention frequency ranged from once weekly to twice weekly for 9 months. The primary outcomes identified were the behavioral and psychological symptoms of dementia (BPSD) and depression scores. The analysis results showed that AAT can ameliorate the neuropsychiatric state of individuals diagnosed with Alzheimer's, $SMD = -0.43$, 95% CI $(-0.62, -0.23)$, $p < 0.00$. The analysis regarding effects on agitation did not show statistical significance, $SMD = -0.28$, 95% CI $(-0.58, 0.02)$, $p = 0.06$. No statistical significance was noted for secondary outcomes of improving cognitive function, activities of daily living, or quality of life. The limitations discussed were the low number of trials available, small sample sizes in a majority of the studies, and unclear intervention details. The authors of this review recommend further research addressing limitations such as RCTs with larger sample sizes and clear descriptions of the AAT interventions.

Hediger et al. (2021) conducted a systematic review and meta-analysis regarding animal-assisted interventions (AAI) for children and adults with post-traumatic stress disorder (PTSD) symptoms. There are 41 studies in this systematic review with a total of 1111 participants. Twenty-eight studies had a pre-post one-group design, 8 studies had a control group and 2 were randomized controlled studies. Participants were diagnosed with PTSD per the DSM-5 criteria with ages ranging from 4 - 86 years old. Animal assistance throughout the studies were primarily horses and dogs. Intervention duration ranged from 4 days and up to 15 months with one study that merged 3 weeks of therapy with placement of dogs for up to 4 years. Specific details of the interventions are not provided; however, various sites were utilized such as a horse-riding center, a ranch, and an aquarium. The primary outcome was a reduction in PTSD or depression symptom severity quantified using a validated observer-rating or self-rating scale. Results revealed a small effect size for AAI when compared to PTSD psychotherapy in decreasing PTSD symptom severity, $SMD = -0.26$, 95% CI: -0.56 to 0.04 . AAI was statistically better than waitlist, $SMD = -0.82$, 95% CI: -1.56 to 0.08 . Acquiring a service dog reduced PTSD symptoms to between -0.43 and -1.10 and depression with medium effect size of -0.74 . Limitations noted that 28 studies rated poor, 13 studies rated fair while no study was rated with good quality. Most of the studies lacked durability data and lacked detailed information on study design, methodology, or the intervention. The authors of this review suggest future studies with empirical study designs and large participant samples to fully establish the efficacy of animal-assisted interventions.

Art Therapy

Versitano et al. (2025) conducted a systematic review examining the effectiveness of art therapy for children and adolescents (ages 0–24; total $N=4,053$) with acute or severe mental health conditions, most commonly PTSD, as well as depression, anxiety disorders, suicidal ideation, personality disorders, eating disorders, and psychotic disorders. Interventions were delivered by trained art therapists in individual or group formats, typically over 6–12 weeks, with outcomes assessed using validated measures such as the UCLA PTSD Reaction Index, Beck Depression Inventory-II, Revised Children's Anxiety and Depression Scale, and Children's Global Assessment Scale. Primary outcome findings indicated the strongest effects for PTSD symptom reduction (approximately 63–67% improvement), with controlled trials also demonstrating benefits in emotional regulation, self-awareness, and self-expression, alongside reductions in self-harm behaviors, aggression, and anger. Comparative analyses suggested art therapy was more effective than music or poetry therapy but slightly less effective than dance therapy. Follow-up data were most commonly reported at 3 and 6 months. However, interpretation is limited by substantial heterogeneity in interventions, populations, and outcome measures, frequent reliance on small samples and qualitative or case-based evidence, and difficulty isolating the independent effects of art therapy within multimodal treatments. Overall, art therapy shows promise across trauma-related, emotional, and behavioral domains, particularly for PTSD. The authors of this study promote further higher quality, standardized studies to clarify efficacy, optimal protocols, and long-term durability.

Vogel et al. (2024) conducted a systematic review of seven studies on the beneficial effects of art therapy for children and adolescents with autism spectrum disorder (ASD). Study designs included three pre-test–post-test and four quasi-experimental studies, two of which had control groups. Sample sizes ranged from 2 to 44 participants, aged 4 to 12 years. Art therapy interventions involved were painting, drawing, clay, color therapy, and sensory art, delivered individually or in groups. Duration ranged from 6 weeks to 9 months, with session frequency from one to three times weekly, lasting 40 to 120 minutes. A variety of tools were used to measure primary outcomes such as the Behavior Rating Inventory of Executive Functioning (BRIEF); Vineland Adaptive Behavior Scale (VABS); Social Skills Improvement System Rating

Scales; Childhood Autism Rating Scale (CARS); Children's Social Behavior Questionnaire (CSBQ); and Observation in Art Therapy of a child diagnosed with ASD (OAT-A). Primary outcome results indicated improvements in social, behavioral, and motor symptoms associated with ASD. However, limitations included inconsistent intervention delivery, small sample sizes, limited long-term data, lack of reporting on co-occurring diagnoses, and lack of empirical study designs. The authors of this study recommend future robust research design to address these limitations and establish the clinical utility of art therapy.

Bosman et al. (2021) completed a systematic review on 7 studies regarding the efficacy of art therapy on anxiety, depression, and quality of life (QoL) for individuals diagnosed with cancer; three non-randomized intervention studies and four randomized controlled trials. The sample sizes ranged from 24 – 183 adult participants, the session duration ranged from 6 weeks to 4 months. Inclusion criteria for the studies is described as interventions were guided by an artist or art therapist with participants actively engaged in the therapeutic process. Primary outcome measures were identified as anxiety, depression, and/or quality of life in adults with cancer. There were 4 studies addressing anxiety with 2 studies revealing a significant decrease in anxiety scores in the intervention group, with the score decreasing from 44.3 to 37.1 ($p = 0.002$), while the anxiety scores in the control group did not produce a significant change. Additionally, the study did not find a notable difference in anxiety scores between the two groups. The remaining 2 anxiety studies found no significant results within the intervention groups or control groups. Three studies addressed depression measures between intervention and control groups. Two studies showed depression scores in the intervention group to significantly improved compared to the control group ($p < 0.001$ and $p = 0.001$ respectively), while the third depression revealed neither significant improvement in depression scores within the groups nor between the groups. Lastly, 6 studies focused on QoL, with 4 studies showing improvement. Two of the studies found significant outcomes for QoL; one found significance between the intervention groups and the control group ($p = 0.001$), while the second study revealed improvement in quality of life, with the global health status/QoL score increasing from 26.4 to 81.3 ($p < 0.001$). Limitations include lack of randomization in 3 of the 7 studies, 3 of the 7 studies did not include men, varying methods and duration of sessions, and varying cultural settings which contributes to heterogeneity of the studies. More randomized controlled trials with larger sample sizes are needed to establish effectiveness and to standardize protocols.

Dance/Movement Therapy

Christopher and colleagues (2025) conducted a systematic review and meta-analysis on the effectiveness of dance therapy for the primary outcome of reducing stress and depression. The review included five studies ($n = 613$), with 91.2% female participants. Four studies were randomized controlled trials (RCTs), and one was a non-randomized controlled study. Sample sizes ranged from 25 to 166. Participants were adults from any clinical population experiencing symptoms of stress and depression. Dance interventions included improvisation, shared rhythm, and structured movement. Session frequency ranged from 10–12 sessions over 3 months (90 minutes each) to twice-weekly 60-minute sessions over 12 weeks. Assessment tools included the Brief Symptom Inventory, Clinical Outcomes in Routine Evaluation (CORE), Beck Depression Inventory, Hospital Anxiety and Depression Scale, Symptom Checklist-90, and Perceived Stress Scale. Two studies assessed follow-up effects at 6 weeks and 3 months, with one study assessing at 1 year. Primary outcome results showed no statistically significant effects on stress ($p = 0.12$) or depression ($p = 0.49$). Key limitations included variability in intervention types, session frequency and duration, limited follow-up data, small sample sizes, and limited generalizability due to the predominantly female sample. Future research is needed to address these limitations and determine clinical efficacy.

Karkou et al. conducted a Cochrane Review (2023) regarding dance movement therapy (DMT) and the primary outcome of impact on individuals diagnosed with dementia. A single study was identified that met inclusion criteria. The study was a 3-arm parallel-group randomized controlled trial with 204 adults with mild neurocognitive disorder or dementia. Outcomes of interest were the effects of DMT on behavioral, social, cognitive and emotional symptoms of dementia in comparison to no treatment, standard care or any other treatment. The DMT intervention was 12 weeks in duration and compared to exercise and a waiting list control group. The 3 groups were assessed immediately at post-intervention, and at 3 and 9 months. The 12-item Neuropsychiatric Inventory was used for symptom assessment. Results revealed that, at intervention end, DMT had minimal to no difference in neuropsychiatric symptoms when compared with waiting list (MD 0.3, 95% CI -0.96 to 1.56; low-certainty evidence) or exercise (MD -0.30, 95% CI -1.83 to 1.23; low-certainty evidence). Furthermore, there were no effects at 3 or 9 months. Cognitive functioning was assessed with a variety of tools with no statistically significant between-group differences. DMT results in little to no difference in comparison to exercise or waiting list for all time periods. The 4-item Geriatric Depression Scale was used to assess depression. Primary outcome results revealed a small decrease in depressive symptoms at therapy end (MD -0.60, 95% CI -0.96 to -0.24; low-certainty evidence). When compared to exercise at DMT end, the result showed a small reduction in depressive symptoms that is durable for 3 and 9 months (MD -0.40, 95% CI -0.76 to -0.04, low-certainty evidence). The review authors conclude that additional RCTs are needed to determine efficacy and benefits of DMT for symptoms of dementia.

Salihu and colleagues (2021) completed a meta-analysis investigating dance interventions on the primary outcome of improved depression symptoms, anxiety, and stress in adults with and without musculoskeletal disorders. Articles for the final selection were 28 randomized controlled trials with a total of 2249 participants. The majority of participants were females, aged 18-85, some with underlying health conditions such as Parkinson's disease (17.9%). Dance movement therapy was the most studied technique. Most of the control groups among the studies used normal daily activities as the usual care with some using music, physical or other activities. Frequency of the dance interventions were from once per week to twice per week, 60 minute sessions, for a duration of 12 weeks. Communities and care facilities were the most utilized locations for the interventions. Depression, anxiety, and stress levels were recorded using a variety of standardized instruments such as Depression-Anxiety-Stress Scale, the Beck Depression Inventory, and the Zung Self-Rating Scale. The quality of the studies were described as fair (n=12) and good (n=16), while the quality of evidence ranged from very low to low. The yielded primary outcome results were statistically significant for reducing depressive symptoms (SMD = -0.69, 95% CI -0.91 to -0.35, $p < 0.001$), for anxiety (SMD = -0.99, 95% CI = -1.92 to -0.05, $p < 0.05$), and for stress (SMD = -1.0, 95% CI = -1.83 to -0.17, $p < 0.05$). Statistical significance was found implementing at least 150 minutes per week of dance therapy to decrease depressive symptoms (SMD = -0.72, 95% CI -0.20 to -0.25, $p < 0.01$). Although the meta-analysis found statistical significance, the authors note that results should be considered with caution due to various limitations across the trials. A remarkable limitation is that none of the included trials were described as high quality. Additionally, there were design issues such as small sample sizes, lack of blinding, different types of dance with varied protocols, and heterogeneity within the characteristics of the participants. Further high quality studies are recommended and needed to establish effective dance therapy protocols and outcomes.

Equine Therapy

According to an UpToDate review (Hale & Harris, 2026), further empirical investigation is warranted before animal-assisted therapy or hippotherapy can be formally endorsed as a recommended intervention autism spectrum disorder.

Xiao et al. (2023) conducted a systematic review and meta-analysis examining the effects of equine-assisted activities and therapies (EAAT) on individuals with autism spectrum disorder (ASD); primary outcomes reviewed were social, communicative, and functional. The review included 25 studies, 10 of which were randomized controlled trials (RCTs), involving participants aged 3 to 16 years diagnosed with ASD. In eight studies, participants also had co-occurring conditions such as ADHD, intellectual disability (ID), hypersensitivity and sensory integration disorder (HSID), learning disabilities (LD), and seizure disorders (SD). Sample sizes ranged from 3 to 116 participants, with a total of 623 individuals and an average sample size of 25. Examples of interventions are preparation and warm-up such as greetings and health/safety briefings, stretching exercises, and parental assessments and interviews. Ground-based interventions such as grooming, feeding, leading horses, and horsemanship skills. Mounted intervention activities such as therapeutic horseback riding (THR) exercises and riding instruction. Closure interventions such as thanking horses and staff, drawing or reflection activities, and parent/caregiver debriefing. Intervention durations ranged from 4 to 24 weeks, with sessions lasting 45 to 180 minutes, totaling 240 to 1,920 minutes. Multiple assessment tools were used, including the Autism Diagnostic Observation Schedule (ADOS, n=6), Social Communication Questionnaire (SCQ, n=5), Leiter International Performance Scale (n=5), and DSM criteria (n=5). Other tools included the Aberrant Behavior Checklist—Community (ABC-C), Adaptive Behavior Assessment System (ABAS), Clinical Assessment Battery Teacher Rating Form (CAB-T), Vineland Adaptive Behavior Scale (VABS), Childhood Autism Rating Scale (CARS), and Stone's Social Skills Scale (SSSS). Findings suggest that EAAT can improve primary outcome measure such as social and behavioral functioning, with additional benefits in language development, motor skills, and sensory processing. However, only 11 of the 25 studies met high-quality research standards. Common limitations included small sample sizes, lack of control groups, and limited blinding (only 10 studies were blinded or partially blinded). Additionally, only 14 studies assessed the durability of outcomes, none beyond six months. The authors of this review emphasize the need for rigorously designed future research to validate findings and establish standardized intervention protocols.

A systematic review was conducted by Li and Garcia (2023) regarding the effects of equine-assisted therapy (EAT) for veterans with PTSD. Primary outcome measures were most commonly PTSD symptom severity. Ten studies were selected for the review with a total of 345 participant veterans diagnosed with PTSD. Sample sizes ranged from 7 to 106 participants. There were 4 types of equine interventions: EAT, equine-assisted services (EAS), equine assisted activities and therapies (EAAT), and equine-assisted psychotherapy (EAP). Interventions were weekly in 7 of the articles, 2 articles provided no details on duration of treatment, and 1 study administered treatment daily. Various assessment instruments were used in the studies such as The Short Post-Traumatic Stress Disorder Rating Interview (SPRINT), the Patient Health Questionnaire (PHQ-9), the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) and the PCL-5 (DSM-5 symptom checklist). Results indicated that significant improvement was identified regarding the ability to work and complete daily tasks per the SPRINT scale. Primary outcome measure of symptom reduction was noted in the PHQ-9, PCL-5, and CAPS-5 scores. The authors suggest beneficial elements of EAT while recognizing numerous limitations in the 10 studies. Among the limitations noted are small sample sizes with little to no statistical power, lack of control groups, lack of

randomization and blinding, and lack of durability data. Future research is warranted to address these limitations and to determine the overall efficacy of EAT.

Diaz and associates (2022) conducted a review of 6 qualitative studies and 3 quantitative studies regarding the effects of equine-assisted services (EAS) for individuals diagnosed with substance use disorders (SUD). The primary outcomes focus across the studies were treatment retention, treatment completion, decreased depression and anxiety symptoms. Most participants were 26 years-old or younger with 4 studies including only the adolescent age group. Sample sizes ranged from 8 to 108. The intervention is described as horse-assisted therapy (HAT) with the session duration ranging from 6 weeks to 20 weeks. Quantitative results for 2 studies on HAT showed that the HAT participants when compared to treatment as usual (TAU) group, the HAT group was more likely to complete treatment ($p < 0.001$), remain in treatment for a longer period ($p < 0.001$), and remain in treatment for 90 days or more ($p = 0.001$). The second quantitative study results reported no significant association between participants receiving HAT versus TAU and dropout rates comparative to treatment completion ($p = 0.553$) or transferring to another treatment facility relative to treatment completion ($p = 0.335$). Qualitative themes among the studies included perceived improvement in affect, a pleasant variation from TAU, and increased motivation for treatment. The overall results indicate the potential beneficial aspects of EAS for the treatment of SUD. Due to the numerous limitations among the studies, results should be interpreted with caution. Additional, future research with robust design and larger sample sizes are needed to support the efficacy of HAT for the treatment of SUD.

Helmer et al. (2021) performed a systematic review of equine-assisted services (EAS) for children and youth (ages 6-18 years) diagnosed with attention-deficit/hyperactivity disorder (ADHD). Twelve articles were reviewed, 8 noncontrolled prospective studies and 4 randomized controlled trials (RCTs). Six of the studies had no control group. Sample sizes ranged from 6 to 64. Intervention lengths ranged from 4 weeks to 20 weeks. Primary outcomes measured were primarily a decrease in ADHD symptoms. Evidence was established for the effectiveness of various forms of EAS, including equine-assisted physical therapy (EAPT) and therapeutic riding (TR). Improvements in body functions and structures ($n = 10$) were identified for mental and neuromusculoskeletal functions, as well as functions of the cardiovascular system using EAPT ($n = 6$). Quality of life (QoL) was improved in both TR and EAPT ($n = 4$). Limited evidence was yielded regarding the positive effect on activity and participation ($n = 4$) after TR interventions. This review shows that potentially EAS may be beneficial in supporting the physiological functions of body systems for children diagnosed with ADHD. Future studies are needed to determine quality of life benefits along with understanding the unique mechanisms of change within each different EAS. Larger RCTs to replicate significant findings are required to confirm efficacy, outcomes, and protocols for children diagnosed with ADHD.

Music Therapy

de Witte et al. (2025) conducted a systematic review with multilevel meta-analyses evaluating the primary outcome of music therapy for anxiety and physiology effects in adult populations ($N=3,276$). Settings included mental health, medical, and work/study settings, including individuals both with and without formal anxiety diagnoses. Interventions were delivered by trained music therapists in individual or group formats and ranged from 1 to 30 sessions, incorporating receptive (music listening), active (singing or instrument playing), or combined approaches. Outcomes were assessed using validated measures such as the State-Trait Anxiety Inventory (STAI), Visual Analog Scale (VAS), Self-Rating Anxiety Scale (SAS), Hospital Anxiety and Depression Scale-Anxiety (HADS-A), and Beck Anxiety Inventory (BAI). Meta-analytic findings demonstrated a statistically significant moderate effect on overall anxiety reduction ($g=0.357$), with slightly stronger effects observed for self-reported anxiety outcomes ($g=0.410$). Receptive and combined interventions were identified as more effective than active-only approaches, and no significant differences in outcomes were observed across clinical or nonclinical settings. However, interpretation is limited by substantial heterogeneity in study designs and populations, lack of blinding, difficulty distinguishing music therapy effects from music listening alone, and absence of follow-up data beyond post-treatment, limiting conclusions regarding durability. The authors of this study state that while findings support music therapy as a promising nonpharmacologic intervention for anxiety, further research is needed to establish optimal dosing parameters, clarify mechanisms of action, and determine long-term effectiveness.

Lee et al. (2025) conducted a systematic review and meta-analysis of randomized controlled trials evaluating music therapy for depression across diverse age groups (children, adults, and older adults), with sample sizes ranging from 14 to 318 participants. Included populations had clinically diagnosed depression, often with comorbid conditions such as cancer, dementia, Parkinson's disease, stroke, ADHD, postnatal depression, and substance use disorders. Interventions included active music therapy (e.g., singing, instrument playing), receptive therapy (listening with therapist interaction), and music medicine (passive listening without therapeutic engagement), delivered in individual or group formats over 4–26 weeks by either trained therapists or non-professionals. The primary outcome was depression and severity. Outcomes were measured using validated tools such as the BDI, HAM-D, MADRS, GDS, and PHQ. Meta-analysis demonstrated a large and statistically significant reduction in depressive symptoms ($SMD = -0.97$, 95% CI: -1.23 to -0.71 , $p < .01$), with similarly large effects observed across modalities (active: $SMD = -1.22$; receptive: $SMD = -1.13$; music medicine: $SMD =$

-0.97). However, substantial heterogeneity was present ($I^2 = 85\%$), and overall evidence quality was rated as very low. Limited follow-up data suggested some improvements at 3 and 6 months, though findings were inconsistent and often not statistically significant. Key limitations included poor blinding, small sample sizes, and wide variability in intervention protocols and populations. The authors of this study report that while findings suggest music-based interventions may significantly reduce depressive symptoms, further high-quality, rigorously designed RCTs are needed to establish clinical efficacy, standardize treatment parameters, and determine long-term outcomes.

In a 2025 Cochrane Database systematic review, van der Steen et al. evaluated the effectiveness of music-based therapeutic interventions for individuals with dementia. The review included 30 randomized controlled trials involving 1,720 participants with differing levels of symptom severity, primarily residing in care facilities across 15 countries. Interventions were provided individually or in groups and incorporated both active and passive musical components. Results of music interventions compared to usual care indicated that for depressive symptoms there was a small, beneficial effect, $SMD = -0.23$; behavioral symptoms found a small to moderate, beneficial effect, $SMD = -0.31$; agitation found little to no effect, $SMD = -0.05$; cognition found a small, possibly beneficial effect, however, not statistically significant, $SMD = 0.19$. Results for music interventions compared to other interventions indicate for social behavior a moderate improvement, $SMD = +0.52$; anxiety symptoms were largely decreased, $SMD = -0.75$; emotional well-being had a small effect, $SMD = +0.20$, depressive symptoms ($SMD = -0.14$) and agitation ($SMD = +0.01$) were not improved. The authors concluded that involving individuals with dementia in at least five sessions of music-based therapy likely improves depressive symptoms and may reduce behavioral symptoms by the end of treatment. However, there is limited evidence of benefits for other outcomes, and no sustained effects were observed beyond the treatment period. Adverse effects were rarely reported and inconsistently documented. The authors of this review recommend future research to explore how treatment duration and session frequency impact long-term outcomes.

Wang et al. (2024) conducted a systematic review evaluating the effectiveness of music interventions for posttraumatic stress disorder (PTSD). The review included 14 studies: five single-arm trials, two randomized pilot trials, two non-randomized pilot trials, and five randomized controlled trials (RCTs). Sample sizes ranged from 6 to 330 adults with PTSD symptoms, including soldiers, veterans, prisoners, flood survivors, and other diagnosed individuals. Some participants were also receiving concurrent psychotherapy. Multiple music interventions were employed such as self-directed versus therapist-led interventions, Individual versus group interventions, Active music creation versus passive music listening interventions, and patient-preferred music. Intervention durations ranged from 4 to 30 hours, delivered over 3 to 16 weeks with session frequencies from daily to weekly. PTSD symptom assessments were conducted pre- and post-intervention using tools such as the Posttraumatic Stress Disorder Checklist (PCL), Impact of Event Scale (IES-R), Harvard Trauma Questionnaire (HTQ), International Trauma Questionnaire (ITQ), Clinician Administered PTSD Scale (CAPS) and the PTSD-8. Follow-up assessments occurred from 3 to 9 weeks post-intervention. Findings indicated that passive music listening yielded the most consistent benefits, with one study reporting a large effect size ($d = 1.02$). However, the authors noted limitations, including small sample sizes, lack of control groups, and limited long-term data beyond 16 weeks. They underscored the need for further research to better understand the therapeutic potential of music interventions for PTSD.

Wang and colleagues (2023) performed a systematic review and meta-analysis on the effect of music therapy on older adults with depression. Twenty-one randomized controlled trials with 1777 participants were included. Participants were age 60 years or older, diagnosed with depression. Interventions were various types of music therapy with the supervision of a licensed therapist. The primary outcome identified was reduction in depression severity, utilizing validated depression instruments. Results for the primary outcome of the music therapy group showed a statistically significant reduction in depression symptoms when compared to the control group ($SMD = -1.40$, 95 % $CI = -1.68, -1.13$, $P < 0.00001$), with high heterogeneity ($I^2 = 88\%$, $P < 0.00001$). The GRADE certainty of evidence was rated as low – moderate. Limitations of the included studies were unclear allocation and blinding, no evidence was designated as high quality, and only a small number of studies addressed adverse events. Although the authors report positive results, they acknowledge the need for more empirically designed RCTs with larger sample sizes to establish the efficacy of music therapy as a treatment for depression.

In a Cochrane Database systematic review, Ghetti et al. (2022) examined the direct effects of music therapy (MT) in relieving symptoms associated with substance use disorders. Comparisons for MT were completed with 2 categories of MT; in addition to standard care versus standard care alone, or to standard care plus an active control intervention. There were 21 trials reviewed with a total of 1984 participants diagnosed with substance use disorder; 52% identified alcohol as their substance of choice. Results for 3 studies, 269 participants indicate a moderate-certainty evidence with medium effect for MT plus standard care over standard care alone for substance craving (standardized mean difference (SMD) – 0.66, 95% confidence interval (CI) –1.23 to –0.10. In 5 studies, 408 participants there was a greater reduction in craving for MT intervention lasting 1 to 3 months; and small-to-medium effect supporting MT for motivation for treatment/change (SMD 0.41, 95% CI 0.21 to 0.61). There was no definitive evidence of a positive effect on depression in 3 of the studies,

100 participants (SMD -0.33, 95% CI -0.72 to 0.07). In 5 studies, 411 participants, a moderate effect was detected in motivation for treatment/change when comparing MT plus standard care to another active intervention plus standard care (SMD 0.46, 95% CI -0.00 to 0.93). No definitive evidence was found for effect of MT on motivation to stay sober when compared to active intervention, effect on substance craving, effect on depression, effect on substance use, or effect at 1-month follow-up. The authors conclude that MT as 'add on' treatment to standard care can produce moderate reductions in substance craving and enhance motivation for change for people diagnosed with SUDs receiving treatment in various settings. The authors of this review rate findings as low-to-moderate confidence due to limitations present within the studies.

Dhippayom and associates (2022) conducted a systematic review and network meta-analysis on the effects of music intervention on depression in older adults with the primary outcome as level of depression. Fifteen RCTs were reviewed with 1144 adult participants (mean age 67.9-86.6 years), diagnosed with depression. Six trials included individuals diagnosed with dementia, while the remaining trials did not measure and report dementia conditions among their participants. Most of the studies (10 out of 15) were investigating older adults with mild depression (527 participants). Three trials were studied in 423 older adults with an average to normal level of depression; and one trial each were studied in older adults with major depression, without a measured baseline level of depression among participants. Music interventions were categorized into 3 methods; active music therapy (ACT), receptive music therapy (Recep), music medicine (MM). Duration of the music interventions were described per week, i.e., high (>60 minutes/week), and low (≤60 minutes/week) intensity. Results indicate when compared with usual care, the most effective music intervention was active music therapy >60 minutes/week by music therapist (Act/High/MT) (SMD -3.00; 95%CI, -3.64,-2.35), followed by music medicine >60 minutes/week by non-music therapist (MM/High/NonMT) (SMD -2.06; 95%CI, -2.78,-1.35) with moderate and high certainty of evidence, respectively. Depression scores in adults > 60 years old treated with ACT/High/MT were also notably lower than all other interventions, except MM/High/NonMT. Low intensity music interventions other than ACT/Low/MT had no impact on depression. No follow-up data was reported. More high-quality, randomized controlled trials are needed to assess the effects and durability of music intervention on depressive symptoms among adults > 60 years old.

Icel and Basogul (2021) completed an experimental study to investigate the effects of progressive muscle relaxation training and music therapy on anger and sleep quality. Participants (n=66) were chronic psychiatric patients, ages 18-59, attending the Community Mental Health Center (CMHC). Participants were divided into a control group (n=32) and intervention group (n=34). Progressive muscle relaxation training with music therapy were implemented in the intervention group for 2 sessions per week, 1 hour sessions, for 3 months. The primary outcomes measured were sleep quality and anger levels. The Pittsburgh Sleep Quality Index (PSQI) and the Trait Anger/Anger Expression Inventory were used for the pre and post-test measures. The overall findings showed statistical significance difference between the pre-test and post-test mean scores of the intervention group ($p \leq .001$). After the intervention, a statistically significant difference was indicated between the PSQI, anger-in, anger-out, anger-control, and trait anger scale scores of the two groups ($p \leq .001$). An additional notable result was a statistically significant relationship between sleep quality and anger scores in both the pre-test and post-test ($P < .05$); the post-test result reveals that the intervention controlled anger expression while sleep quality increased. According to the researchers, the results of this study support relaxation training and music therapy combined with pharmacology as beneficial to chronic psychiatric patients. Limitations of the study include small sample size, limited to CMHC participants with lack of generalizability, and lack of durability follow-up data. Future research with robust study design is recommended to further establish and support efficacy.

Guidelines & Consensus Statements

- ***The Department of Veterans Affairs and Department of Defense (VA/DoD)***
 - Clinical Practice Guidelines for the Management Posttraumatic Stress Disorder And Acute Stress Disorder (2023): There is insufficient evidence to recommend for or against music, art, or dance interventions for the treatment of PTSD.

U.S. Food and Drug Administration

The following modalities are not subject to regulation by the U.S. Food and Drug Administration (FDA):

- Animal-assisted therapy
- Art therapy
- Dance/movement therapy (DMT)
- Equine therapy
- Music therapy

Centers for Medicare and Medicaid Services

Medicare does not have National Coverage Determinations (NCDs) or Local Coverage Determinations (LCDs) for the following complementary and alternative medicine modalities used in treating behavioral disorders and/or substance use:

- Animal-assisted therapy
- Art therapy
- Dance/movement therapy (DMT)
- Equine therapy
- Music therapy

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member-specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other clinical criteria may apply.

CPT Codes	Description
90899	Unlisted psychiatric service or procedure
G0176	Activity therapy, such as music, dance, art or play therapies not for recreation, related to the care and treatment of patient's disabling mental health problems, per session (45 minutes or more)
H2032	Activity therapy, per 15 minutes
S8940	Equestrian/hippotherapy, per session

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Revision History

Date	Summary of Changes
06/21/2022	Annual review: updated references/sourcing.
07/18/2023	Annual review: updated references/sourcing.
12/12/2023	Reinstated the following topics per CTAC: Naturopathic detoxification Sauna/niacin detoxification (e.g., New Life Detox)
06/18/2024	Annual review: added Animal-Assisted Therapy information; updated references/sourcing.
07/22/2025	Annual review: Approved by Optum committees on 6/16/2025 and 07/22/2025 - Added Brainspotting Therapy - Added Reiki Therapy Updated references/sourcing
07/21/2026	Annual Review: Approved by Optum committees on 07/07/2026 and 07/21/2026 Separated Complementary and Alternative topics into 2 BCPs: Complementary and Alternative Psychotherapeutic Modalities for the Treatment of Behavioral and Substance Use Disorders Complementary and Alternative Somatic Modalities for the Treatment of Behavioral and Substance Use Disorders

Appendix

Additional resources considered in support of this policy:

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