

# Art therapy

Clinical Policy ID: CCP.1400

Recent review date: 8/2024

Next review date: 12/2025

Policy contains: Aging; art therapy; cancer; dementia; depression; psychosis; schizophrenia; sexual abuse.

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## Coverage policy

Art therapy is clinically proven and, therefore, may be medically necessary (National Comprehensive Cancer Network, 2024; National Institute for Health and Care Excellence, 2014, 2016a, 2016b; Regev, 2018):

- For members in a case management or disease management program with a behavioral health diagnosis, including dementia, depression, psychosis, or schizophrenia.
- For children with a history of sexual abuse.
- For members with chronic diseases including cancer.
- For members older than age 65 to support mental well-being and independence by developing or maintaining social participation and preventing loneliness and social isolation.

### Limitations

Art therapy is investigational/not clinically proven and, therefore, not medically necessary for post-traumatic stress disorder, as its effectiveness has not been proven for this condition (National Institute for Health and Care Excellence, 2018).

### Alternative covered services

Alternate treatments depend on diagnosis and stage, and include behavioral therapies (cognitive behavioral therapy, trauma-focused cognitive behavioral therapy, single or group psychoanalytic behavioral therapy, and family intervention); pharmacologic therapies (antidepressants and antipsychotics); and alternative leisure activities.

## Background

Art therapy applies art media, the creative process, and the final artwork as a therapeutic and healing process (Art Therapy Credentials Board, 2024b). For persons experiencing developmental, medical, educational, social, or psychological impairment, art therapy is used to improve or restore the patient's functioning and sense of wellbeing.

Art therapy is used in inpatient, outpatient, and community settings (Art Therapy Credentials Board, 2024a). Art therapy may benefit patients in multiple ways, including: by providing a sense of satisfaction and accomplishment, important to those feeling frustrated by their medical conditions; by helping those who are emotionally or verbally withdrawn to express themselves; and by helping those with life-limiting diseases, such as cancer, to find an identity outside of their condition and to make meaning of their experiences.

Entry into the profession of art therapy requires a master's degree (Art Therapy Credentials Board, 2024a). Educational standards for approved art therapy master programs are established and overseen by the American Art Therapy Association. The Art Therapy Credentials Board ensures the educational and professional standards to be a qualified art therapist are met and maintained. The Board confers and administers four levels of professional credentials to art therapy practitioners, including board certification (Art Therapy Credentials Board, 2024b).

## Findings

### Guidelines

The National Institute for Health and Care Excellence's guidelines include art therapy as a behavioral therapy that should be considered in the following conditions: in children and young people (2016) and in adults (2014) with psychosis and schizophrenia; to enhance the mental well-being and sense of independence in older people (2016). The National Institute for Health and Care Excellence 2018 guideline on the management of post-traumatic stress disorder does not recommend art therapy as a treatment in children or adult populations due to insufficient evidence.

One German guideline found insufficient evidence to recommend art therapy for treatment of anxiety disorders (Bandelow, 2022).

The National Comprehensive Cancer Network (2024) recommends creative therapies such as art and music for patients with cancer experiencing distress, while recognizing the limitations of the research.

### Evidence reviews

Several systematic reviews have examined the effectiveness of art therapy. In general, art therapy appears to produce positive effects on health in patients with a range of underlying conditions, but the results are not easily quantifiable or generalizable. Lack of standardization, small samples, limited numbers of studies, and a lack of comparison groups limited the ability to make conclusive determinations. Study heterogeneity prevented meta-analysis in most cases.

Regev (2018) conducted a comprehensive systematic review of art therapy effectiveness across seven adult clinical categories: cancer; non-cancer related medical conditions (advanced heart failure, obesity, human immunodeficiency virus/acquired immunodeficiency syndrome); mental health diagnoses (depression, schizophrenia); trauma; prison inmates; the elderly (depression, dementia); and patients with stress, distress, or burnout in the absence of a clinical diagnosis. The highest quantity and quality of research has been conducted in patients with cancer as a means of improving quality of life and the ability to cope with a variety of psychological symptoms. Relatively few studies have been carried out in the other categories, and the results are mixed.

Studies differed considerably in the therapeutic approach, the proposed interventions, and outcome measures. At times, the intervention was not provided in a manner consistent with the American Art Therapy Association's recommended criteria.

Although more randomized controlled trials have emerged, subsequently published systematic reviews confirm the findings of Regev (2018).

### *Cancer*

Bosman (2021) described positive effects of art therapy on anxiety, depression, and quality of life in adults with cancer based on four of seven interventional studies, but heterogeneity of the interventions and low study quality limited the robustness of the findings. In pediatric palliative cancer care, a qualitative summary of four randomized controlled trials and three nonrandomized studies ( $n = 311$ ) found art therapy in the form of painting resulted in both qualitative physical (activity, stability in breathing, heart rate, and pain) and psychological (anxiety, depression, and anger) improvements. There was insufficient evidence of the effect of pain on these outcomes and at the end of life (Motlagh, 2023).

In patients undergoing active chemotherapy, a meta-analysis of eight randomized controlled trials and 17 quasi-randomized studies ( $n = 1,489$ ) found painting, drawing, and/or sculpting interventions significantly improved quality of life (standardized mean difference = 17.50, 95% confidence intervals 10.05 to 24.95,  $P = .0000$ ) and the social aspect of quality of life (0.31, 0.06 to 0.55,  $P = .01$ ), but not depressive symptoms and coping strategies. Studies were rated as having moderate to high risk of bias (Abu-Odah, 2024).

### *Non-cancer related medical conditions*

Reviews by Lo (2018) and Liu (2024) documented the potential of creative arts-based therapies to address psychosocial needs of stroke survivors, such as positive impacts on daily living activities, limb motor function, fine motor ability, and emotional well-being. In five randomized controlled trials of diabetic patients, art therapy had a positive effect on depression (standardized mean difference = -1.36, 95% confidence interval -1.63 to -1.09,  $P < .00001$ ) and blood glucose (mean difference -0.90; 95% confidence interval -1.03 to -0.77,  $P < .0001$ ), but not on anxiety levels or glycated hemoglobin (Yang, 2021).

### *Developmental conditions*

Martínez-Vérez (2024) synthesized the evidence on the efficacy and applicability of art therapy (26 studies) and music therapy (54 studies) in the treatment of children with certain developmental disorders. Art therapy studies were evenly divided between children with autism spectrum disorder and attention deficit hyperactivity disorder. Most studies were carried out in a clinical setting and in school-aged children. Both art therapy and music therapy had a significant impact on symptomatology, behavior, and communication as well as social, cognitive, and emotional skills in these pediatric populations. The majority of participants perceived the intervention to be of high value.

### *Mental health conditions*

In adolescents with depression, a systematic review of six randomized controlled trials found group painting significantly improved positive and negative emotion scores, along with cognitive function and executive ability (Yuan, 2021). For treating eating disorders, a systematic review of eight studies found inconclusive evidence of effectiveness of visual art- and music-based interventions (Pedra Cruz Bettin, 2024).

In patients with schizophrenia, a systematic review and meta-analysis of 31 randomized controlled trials examined the effectiveness of various art therapies — painting (19 studies), handcrafts (six studies), calligraphy (two studies), and painting combined with calligraphy (four studies). Most studies were rated as having a low or unclear risk of bias. Results of the meta-analysis were reported as standardized mean difference (95% confidence interval). Visual art therapy had a significant small-to-moderate effect on positive symptoms (0.407,

0.233 to 0.581), a moderate effect on negative symptoms (0.697, 0.514 to 0.880), a moderate effect on depression (0.610, 0.398 to 0.821), and a large effect on anxiety (0.909, 0.386 to 1.433). Longer weekly treatment duration was associated with better improvement in positive symptoms, while female participants tended to have more improvements in negative symptoms and anxiety (Du, 2024).

### *Trauma*

In adults, evidence from six controlled, comparative studies reported a significant reduction in psychological trauma symptoms in the treatment groups in half of the studies. One study reported a significant decrease in depression. However, study limitations prevent forming firm conclusions about treatment effectiveness (Schouten, 2015).

The evidence supporting art therapy for trauma in children consists of uncontrolled studies using pre-post designs, qualitative research, and few studies of experimental designs. The study populations included refugees with post-traumatic stress disorder (Annous, 2022) or mixed populations of children with either a psychiatric diagnosis or with psychiatric symptoms but no formal diagnosis (Braitto, 2022). While clinical observations have found value in art therapy as a non-verbal intervention, the research evidence is mixed regarding the benefit of art therapy as an independent intervention or part of expressive, creative, or group therapy in children who have experienced trauma or who have symptoms of post-traumatic stress disorder.

### *The elderly*

A meta-analysis of eight randomized controlled trials concluded that art therapy significantly reduced depression (mean difference -0.78, 95% confidence interval -1.17 to -.38) (Jenabi, 2023). Another showed art therapy of at least 12 weeks in duration improved depression in elderly persons, using physical, intra-personal, processing and communication of emotions, and cultural mechanisms of change (Dunphy, 2019).

A review of persons with dementia ( $n = 653$ ) showed in 15/17 studies, art therapy significantly improved at least one of the following: well-being, quality of life, and biological and psychological symptoms of dementia; three of the 17 studies showed significant outcomes for all categories (Emblad, 2021). In de Souza's (2022) analysis of 14 controlled and uncontrolled trials, art therapy in health treatments produced statistically significant improvements in quality of life, cognitive, and emotional functions (all  $P \leq .005$ ). The most used activities were drawing and painting, although other techniques and materials such as colored pencils, crayons, gouache paints, clay, plaster, and sculptures were reported.

In older persons with mild cognitive impairment, one systematic review suggests art therapy may offer benefits to cognition and psychological well-being, but its impact on the progression of cognitive decline requires further study (Chiang, 2024).

### *Stress*

To address the problem of stress as a factor in poor health, Martin's (2018) review studied stress levels in art therapy participants. Stress as measured by scales, physical symptoms, cortisol, and blood pressure was reduced in participants in eight of 11 art therapy interventions. Two of the studies sampled people with mental health diagnoses, and the family members of people with cancer, and both of these showed statistically significant improvement in stress levels as measured by either blood pressure or cortisol levels. Weiskittle's (2018) narrative synthesis of 27 studies of art therapy in samples of the bereaved found that art therapy helped bereaved persons make meaning of their experience and feel closer to their loved ones.

Martínez-Shaw (2023) identified one randomized controlled trial of 105 mothers that found no significant difference in the ability of narrative writing, art therapy, and the control group to reduce the stress experienced by the arrival of a premature infant.

Mandala art applies the creation of geometric or circular designs, often with a central focal point and radiating patterns, to invoke insight, healing, and self-expression. Mandala art as a form of therapy may improve negative symptoms and hope, relieve pain, and reduce some physiological indicators of stress in patients, but the benefits are uncertain (Zhang, 2024).

In 2019, we updated the references. No policy changes are warranted at this time.

In 2020, we updated the references. No policy changes are warranted.

In 2021, we updated the references. No policy changes are warranted.

In 2022, we updated the references. No policy changes are warranted.

In 2023, we updated the references. No policy changes are warranted.

In 2024, we deleted several older references, updated the reference list, and reorganized the findings section. No policy changes are warranted.

## References

On July 10, 2024, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were “Art therapy” (MeSH), “creative therap\*,” and “activity therap\*.” We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

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## Policy updates

7/2018: initial review date and clinical policy effective date: 9/2018

8/2019: Policy references updated.

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8/2021: Policy references updated.

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