



## Clinical Policy Title: Eating and feeding disorder treatment

Clinical Policy Number: 10.02.09

**Effective Date:** July 1, 2018  
**Initial Review Date:** May 1, 2018  
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**Next Review Date:** June 2019

Policy contains:

- Feeding disorder
- Eating disorder

### Related policies:

**CP# 15.02.03** Nutritional support  
**CP# 11.02.03** Pediatric intensive feeding programs

**ABOUT THIS POLICY:** AmeriHealth Caritas has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas' clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by AmeriHealth Caritas when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. AmeriHealth Caritas' clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. AmeriHealth Caritas' clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, AmeriHealth Caritas will update its clinical policies as necessary. AmeriHealth Caritas' clinical policies are not guarantees of payment.

### Coverage policy

AmeriHealth Caritas considers the treatment of eating and feeding disorders, including, but not limited to bulimia nervosa, binge-eating disorder and anorexia, to be clinically proven and therefore medically necessary (Dingemans 2017, Gosa 2017, Grenon 2017, Grilo 2017, Haleem 2017, Kazdin 2017, Le 2017, Linardon 2017, Nazar 2017, Palavras 2017, Peat 2017, Smith 2017, Tchanturia 2017, Traviss-Turner 2017, Williams 2017, Seah 2016).

### Limitations:

Coverage is typically provided as an outpatient and is only eligible for coverage as an inpatient in special circumstances, including, but not limited to, the presence of a co-morbid condition that would require monitoring in a more controlled environment such as the inpatient setting.

### Alternative covered services:

Physician assessment and nutritional counseling within the network.

## **Background**

Currently, in the United States (and worldwide), the vast majority of individuals in need of mental health services for eating disorders and other mental health problems do not receive treatment (Kazdin 2017). There is a notion that these disorders are self-limiting and self-correcting even though some of these behaviors (e.g., purging) have been identified as clinically significant eating disorders (Smith 2017). Indeed, binge-eating disorder (defined as binge-eating episodes occurring once per week over 3 months) is included as a diagnosis in the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) published in 2013.

Several psychological and behavioral treatment options exist for patients who have been diagnosed with binge-eating disorder (Grilo 2017). Psychological interventions, notably cognitive behavioral therapy, are effective for binge eating disorder or bulimia nervosa but less so for weight loss (Palavras 2017). Cognitive behavioral therapy has led to significant and modest improvements in both subjective and health quality of life (Linardon 2017) in these patients. Cognitive remediation therapy has potential as a supplementary treatment for young people with anorexia nervosa (Tchanturia 2017).

Direct referral of these patients to highly specialized tertiary treatment facilities in an earlier stage of the disorder is likely to be more effective than delayed intervention (Dingemans 2017). Early behavior change accurately predicts later symptom remission for anorexia nervosa and binge eating disorder but there is less predictive accuracy for bulimia nervosa (Nazar 2017).

Group psychotherapy has been found significantly more effective than wait-list controls at achieving abstinence rates of binge eating and/or purging (Grenon 2017). As far as pharmaceutical or alternative treatment, lisdexamfetamine is better at increasing binge abstinence than second-generation antidepressants (Peat 2017), although there is insufficient evidence to determine the effects of oral motor, sensory, and pharmaceutical therapies on functional feeding outcomes.

Preventive interventions for eating disorder risk factors have been reported, but whether these actually lower eating disorder incidence is still uncertain (Le 2017). Administration of tryptophan can boost serotonin neurotransmission to produce therapeutically important effects in anorexia nervosa patients (Haleem 2017).

## **Searches**

AmeriHealth Caritas searched PubMed and the databases of:

- UK National Health Services Centre for Reviews and Dissemination.
- Agency for Healthcare Research and Quality's National Guideline Clearinghouse and other evidence-based practice centers.

- The Centers for Medicare & Medicaid Services (CMS).

We conducted searches on April 4, 2018. Search terms were: “eating disorders,” “feeding disorders,” “treatment of feeding and eating disorders.”

We included:

- **Systematic reviews**, which pool results from multiple studies to achieve larger sample sizes and greater precision of effect estimation than in smaller primary studies. Systematic reviews use predetermined transparent methods to minimize bias, effectively treating the review as a scientific endeavor, and are thus rated highest in evidence-grading hierarchies.
- **Guidelines based on systematic reviews.**
- **Economic analyses**, such as cost-effectiveness, and benefit or utility studies (but not simple cost studies), reporting both costs and outcomes — sometimes referred to as efficiency studies — which also rank near the top of evidence hierarchies.

## Findings

A meta-analysis (Grenon 2017) reviewed the effect of group psychotherapy compared to both wait-list controls and other active treatments for adults (n=1,853) with eating disorders. Group psychotherapy was found significantly more effective than wait-list controls at achieving abstinence rates of binge eating and/or purging, decreasing the frequency of binge eating and/or purging, and reducing related eating disorder psychopathology after treatment. The effects of group psychotherapy and other active treatments (e.g., behavioral weight loss, self-help, individual psychotherapy) did not differ on any outcome at post-treatment or at follow-ups. Group cognitive behavioral therapy and other forms of group psychotherapy did not differ significantly on outcomes at any time point.

A meta-analysis (Smith 2017) compared purging disorder to other eating disorders (i.e., anorexia nervosa, bulimia nervosa, and binge eating disorder and controls). Results supported the notion of purging disorder as a clinically significant eating disorder, but findings were less clear regarding its distinctiveness from other eating disorder diagnoses. More specifically, purging disorder significantly differed from bulimia nervosa, and binge eating disorder in natural course of illness and disorder significantly differed from anorexia nervosa in treatment outcome with purging disorder characterized by a better prognosis. Overall, purging disorder was more similar to anorexia nervosa and binge eating disorder on many dimensional measures of general and eating-related psychopathology, though purging disorder was less severe than bulimia nervosa in most of these domains. The authors noted a need for future studies of purging disorder to assess validators that have not been reported previously such as mortality, medical morbidity, and course of illness.

A systematic review (Dingemans 2017) examined patients with complex and severe eating disorders with regard to severity of illness and level of therapeutic intervention. The authors noted that direct referral of these patients to highly specialized tertiary treatment facilities in an earlier stage of the

disorder is likely to be more effective. After identification of criteria that were indicative of severity and complexity of eating disorder psychopathology a method was applied to obtain consensus from experts on the list of relevant criteria. This decision tool was validated in clinical practice, and cut-off criteria were established. The tool demonstrated good feasibility and validity to identify patients for highly specialized tertiary care.

A systematic review (Gosa 2017) examined the medical evidence of safety and efficacy for common treatments used by clinicians to treat pediatric swallowing and feeding problems. The majority of the included studies (60/61) focused on the use of behavioral therapies to remediate swallowing and feeding disorders and reported mixed findings across all of the targeted outcomes. There was insufficient evidence to determine the effects of oral motor, sensory, and pharmaceutical therapies on functional feeding outcomes. Evidence was available that established the efficacy of behavioral strategies to treat some swallowing and feeding difficulties in a small cohort and in single subject studies; however, there was only limited evidence to support the efficacy and benefit of joint nutrition and behavior intervention programs. This shortcoming applied also to systematic desensitization and operant conditioning behavioral therapy approaches to improve functional feeding and swallowing outcomes in children.

A systematic review and meta-analysis (Tchanturia 2017) assessed the evidence for the safety and efficacy of cognitive remediation therapy in children and adolescent age groups with anorexia nervosa. Cognitive remediation therapy for eating disorders demonstrated promising findings in adult age groups, with randomized treatment trials and systematic reviews demonstrating medium to large effect sizes in improved cognitive performance. The authors noted improvements in cognitive performance with small effect sizes. Patient feedback was positive, with low dropout rates. The findings suggest that cognitive remediation therapy has potential as a supplementary treatment for young people with anorexia nervosa.

A meta-analysis (Peat 2017) compared two pharmacological interventions (second-generation antidepressants versus lisdexamfetamine) and 26 psychological interventions for treatment of binge-eating disorder. Lisdexamfetamine was better at increasing binge abstinence than second-generation antidepressants; therapist-led cognitive behavioral therapy was better at reducing binge-eating frequency than behavioral weight loss, but behavioral weight loss was better at reducing weight. The majority of other treatment comparisons revealed few significant differences between groups.

A meta-analysis (Linardon 2017) examined the effects of cognitive behavioral therapy for eating disorders on quality of life. The authors noted that cognitive behavioral therapy led to significant and modest improvements in both subjective and health quality of life. Quality of life improvements were larger in studies that delivered cognitive behavioral therapy individually and by a therapist or according to the cognitive maintenance model of eating disorders. The authors concluded there is sound evidence that cognitive behavioral therapy for eating disorders is associated with modest improvements in quality of life, and that cognitive behavioral therapy may be associated with greater improvements in quality of life relative to comparison conditions.

A systematic review and meta-analysis (Palavras 2017) reviewed evidence for efficacy of psychological therapies for bulimia nervosa and binge eating disorder and found cognitive behavioral therapy was favored compared to behavioral weight loss therapy with regard to short-term binge eating reduction. However, insufficient evidence was found for superiority for behavioral weight loss therapy efficacy compared to cognitive behavioral therapy considering binge eating remission, reduction of binge eating frequency and weight loss.

A systematic review and meta-analysis (Traviss-Turner 2017) studied the effectiveness of guided self-help for reducing global eating disorder psychopathology and abstinence from binge eating, compared with controls. Results showed an overall effect of guided self-help on global eating disorder psychopathology and binge abstinence. There was strong evidence for an association between diagnosis of binge eating disorder and binge abstinence. The authors noted the limited effectiveness of guided self-help in children and young people, invariably high dropout rates and how technology can enhance interventions.

A systematic review (Le 2017) examined the effectiveness of eating disorder prevention interventions and found small to moderate effect on reduction of eating disorder risk factors or symptoms which occurred up to three-year post-intervention. For universal prevention, media literacy interventions significantly reduced shape and weight concerns for both females and males. For selective prevention, cognitive dissonance interventions were superior to control interventions in reducing eating disorder symptoms. Cognitive behavioral therapy interventions had the largest effect size on dieting outcome at 9-month follow-up while the healthy weight intervention reduced eating disorder risk factors and body mass index. No indicated prevention interventions were found to be effective in reducing eating disorder risk factors.

A narrative review (Grilo 2017) was strongly supportive of cognitive-behavioral therapy and interpersonal psychotherapy for binge eating disorder, but noted they do not produce weight loss. Behavioral weight loss therapy achieves good outcomes for binge eating disorder plus produces modest weight loss over the short-term. The authors identified two significant predictors of outcome: (1) the presence of overvaluation of body shape and weight and (2) the occurrence of rapid response to treatment.

A systematic review and meta-analysis (Nazar 2017) examined the widely held notion that early response to eating disorders treatment is a predictor of favorable outcome to therapy. In anorexia nervosa, the odds ratio of early response predicting remission was 4.85 to 1. In bulimia nervosa, the odds ratio was 2.75 to 1. For binge eating disorder, the odds ratio was 5.01 to 1.

A systematic review (Seah 2016) identified healthcare professionals' knowledge and attitudes toward patients with eating disorders. The authors identified factors like lack of knowledge or training as obstacles to proper care for persons with eating disorders. Furthermore, the review suggested that the majority of healthcare professionals view patients with eating disorders in a negative manner, as

“abnormal” or “different,” and these biases influence knowledge and attitude. Patients were perceived to be able to control their own conditions, based on societal beliefs that body weight and shape are controlled by individuals. Patients were also viewed as being in denial of their conditions, thus contributing to healthcare professionals' feelings of “helplessness” toward the patients.

A narrative review (Williams 2017) recounts that low energy availability is the key etiologic factor in the female athlete triad, and that despite thirty years of research accurate screening, diagnosis, and treatment of the condition remains a challenge. The female athlete triad is defined as low energy availability, menstrual dysfunction and low bone mineral density. The authors advocated for more recent techniques (i.e., validated scoring tools, a more individualized approach to diagnosing and treating low energy availability combined with novel educational and behavior interventions) and guidance for clearance and return to play.

A narrative review (Haleem 2017) cites a growing body of evidence which suggests that excessive dieting and food restriction can decrease brain tryptophan and serotonin in anorexia nervosa patients to precipitate depression, psychosis and hyperactivity. The article notes there are currently no U.S. Food and Drug Administration (FDA) approved pharmacological treatments available for these patients, and that antidepressants and antipsychotics are not very effective. Tryptophan, an essential amino acid, is the sole precursor of neurotransmitter 5-hydroxytryptamine (5-HT; serotonin). Acting on the knowledge that anorexia nervosa is associated with high levels of psychiatric comorbidity including psychosis, hyperactivity, depression and anxiety suggests that administration of tryptophan can boost serotonin neurotransmission to produce therapeutically important effects in anorexia nervosa patients.

Kazdan (2017) identifies the opportunities for improving care for eating and feeding disorders including: (1) train-the-trainer, which involves providing expert training to a single therapist who then trains other therapists at his/her center and acts as an internal coach and champion; (2) web-centered training, or using the Internet and technology to train and supervise therapists; (3) implementation of best-buy interventions, which are selected based on their cost-effectiveness, affordability, feasibility, and appropriateness for the setting; (4) electronic support tools that help clinicians ensure key treatment components are covered and aid in decision making; and (5) higher-level support and policy supportive of the use of these therapies.

**Summary of clinical evidence:**

Citation	Content, Methods, Recommendations
<p>Dingemans (2017)</p> <p>Development and Validation of a Decision Tool for Early Identification of Adult Patients with Severe and Complex Eating</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A systematic review examined patients with complex and severe eating disorders with regard to severity of illness and level of therapeutic intervention.</li> <li>• The authors noted that direct referral of these patients to highly specialized tertiary treatment facilities in an earlier stage of the disorder is likely to be more effective.</li> <li>• After identification of criteria that were indicative of severity and complexity of eating disorder</li> </ul>

Citation	Content, Methods, Recommendations
Disorder Psychopathology in Need of Highly Specialized Care	<p>psychopathology a method was applied to obtain consensus from experts on the list of relevant criteria.</p> <ul style="list-style-type: none"> <li>• This decision tool was validated in clinical practice, and cut-off criteria were established.</li> <li>• The tool demonstrated good feasibility and validity to identify patients for highly specialized tertiary care.</li> </ul>
Gosa (2017)  Evidence to support treatment options for children with swallowing and feeding disorders: A systematic review.	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A systematic review examined the medical evidence of safety and efficacy for common treatments used by clinicians to treat pediatric swallowing and feeding problems.</li> <li>• The majority of the included studies (60/61) focused on the use of behavioral therapies to remediate swallowing and feeding disorders and reported mixed findings across all of the targeted outcomes.</li> <li>• There was insufficient evidence to determine the effects of oral motor, sensory, and pharmaceutical therapies on functional feeding outcomes.</li> <li>• Evidence was available that established the efficacy of behavioral strategies to treat some swallowing and feeding difficulties in a small cohort and in single subject studies; however, there was only limited evidence to support the efficacy and benefit of joint nutrition and behavior intervention programs.</li> <li>• This shortcoming applied also to systematic desensitization and operant conditioning behavioral therapy approaches to improve functional feeding and swallowing outcomes in children.</li> </ul>
Grenon (2017)  Group psychotherapy for eating disorders: A meta-analysis.	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A meta-analysis reviewed the effect of group psychotherapy compared to both wait-list controls and other active treatments for adults (n=1,853) with eating disorders.</li> <li>• Group psychotherapy was found significantly more effective than wait-list controls at achieving abstinence rates of binge eating and/or purging (RR = 5.51, 95% CI: 3.73, 8.12), decreasing the frequency of binge eating and/or purging (g = 0.70, 95% CI: 0.51, 0.90), and reducing related eating disorder psychopathology (g = 0.49, 95% CI: 0.32, 0.66) after treatment.</li> <li>• The effects of group psychotherapy and other active treatments (e.g., behavioral weight loss, self-help, individual psychotherapy) did not differ on any outcome at post-treatment or at follow-ups.</li> <li>• Group cognitive behavioral therapy and other forms of group psychotherapy did not differ significantly on outcomes at any time point.</li> </ul>
Grilo (2017)  Psychological and Behavioral Treatments for Binge-Eating Disorder.	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A narrative review was strongly supportive of cognitive-behavioral therapy and interpersonal psychotherapy for binge eating disorder, but noted they do not produce weight loss.</li> <li>• Behavioral weight loss therapy achieves good outcomes for binge eating disorder plus produces modest weight loss over the short-term.</li> <li>• The authors identified two significant predictors of outcome: (1) the presence of overvaluation of body shape and weight and (2) the occurrence of rapid response to treatment.</li> </ul>
Haleem (2017)  Improving therapeutics in anorexia nervosa	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A narrative review cites a growing body of evidence which suggests that excessive dieting</li> </ul>

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with tryptophan.	<p>and food restriction can decrease brain tryptophan and serotonin in anorexia nervosa patients to precipitate depression, psychosis and hyperactivity.</p> <ul style="list-style-type: none"> <li>• The article notes there are currently no U.S. FDA approved pharmacological treatments available for these patients, and that antidepressants and antipsychotics are not very effective.</li> <li>• Tryptophan, an essential amino acid, is the sole precursor of neurotransmitter 5-hydroxytryptamine (5-HT; serotonin).</li> <li>• Acting on the knowledge that anorexia nervosa is associated with high levels of psychiatric comorbidity including psychosis, hyperactivity, depression and anxiety suggests that administration of tryptophan can boost serotonin neurotransmission to produce therapeutically important effects in anorexia nervosa patients.</li> </ul>
<p>Kazdin (2017)</p> <p>Addressing critical gaps in the treatment of eating disorders</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• Currently, in the United States (and worldwide), the vast majority of individuals in need of mental health services for eating disorders and other mental health problems do not receive treatment</li> <li>• Opportunities for improving care for eating and feeding disorders including: (1) train-the-trainer, which involves providing expert training to a single therapist who then trains other therapists at his/her center and acts as an internal coach and champion; (2) web-centered training, or using the Internet and technology to train and supervise therapists; (3) implementation of best-buy interventions, which are selected based on their cost-effectiveness, affordability, feasibility, and appropriateness for the setting; (4) electronic support tools that help clinicians ensure key treatment components are covered and aid in decision making; and (5) higher-level support and policy supportive of the use of these therapies.</li> </ul>
<p>Le (2017)</p> <p>Prevention of eating disorders: A systematic review and meta-analysis.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A systematic review examined the effectiveness of eating disorder prevention interventions and found small to moderate effect on reduction of eating disorder risk factors or symptoms which occurred up to three-year post-intervention.</li> <li>• For universal prevention, media literacy interventions significantly reduced shape and weight concerns for both females (-0.69, confidence interval (CI): -1.17 to -0.22) and males (-0.32, 95% CI -0.57 to -0.07).</li> <li>• For selective prevention, cognitive dissonance interventions were superior to control interventions in reducing eating disorder symptoms (-0.32, 95% CI -0.52 to -0.13).</li> <li>• Cognitive behavioral therapy interventions had the largest effect size (-0.40, 95% CI -0.55 to -0.26) on dieting outcome at 9-month follow-up while the healthy weight intervention reduced eating disorder risk factors and body mass index.</li> <li>• No indicated prevention interventions were found to be effective in reducing eating disorder risk factors.</li> </ul>
<p>Linardon (2017)</p> <p>The effects of cognitive-behavioral therapy for eating disorders on quality of life: A meta-analysis.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A meta-analysis examined the effects of cognitive behavioral therapy for eating disorders on quality of life.</li> <li>• The authors noted that cognitive behavioral therapy led to significant and modest improvements in both subjective and health quality of life.</li> <li>• Quality of life improvements were larger in studies that delivered cognitive behavioral therapy</li> </ul>



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	<p>individually and by a therapist or according to the cognitive maintenance model of eating disorders.</p> <ul style="list-style-type: none"> <li>The authors concluded there is sound evidence that cognitive behavioral therapy for eating disorders is associated with modest improvements in quality of life, and that cognitive behavioral therapy may be associated with greater improvements in quality of life relative to comparison conditions.</li> </ul>
<p>Nazar (2017)</p> <p>Early Response to treatment in Eating Disorders: A Systematic Review and a Diagnostic Test Accuracy Meta-Analysis.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>A systematic review and meta-analysis examined the widely held notion that early response to eating disorders treatment is a predictor of favorable outcome to therapy.</li> <li>In anorexia nervosa, the odds ratio of early response predicting remission was 4.85(95%CI: 2.94-8.01).</li> <li>In bulimia nervosa, the odds ratio was 2.75(95%CI:1.24-6.09). For binge eating disorder, the odds ratio was 5.01(95%CI: 3.38-7.42).</li> </ul>
<p>Palavras (2017)</p> <p>The Efficacy of Psychological Therapies in Reducing Weight and Binge Eating in People with Bulimia Nervosa and Binge Eating Disorder Who Are Overweight or Obese-A Critical Synthesis and Meta-Analyses.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>A systematic review and meta-analysis reviewed evidence for efficacy of psychological therapies for bulimia nervosa and binge eating disorder and found cognitive behavioral therapy was favored compared to behavioral weight loss therapy with regard to short-term binge eating reduction.</li> <li>However, insufficient evidence was found for superiority for behavioral weight loss therapy efficacy compared to cognitive behavioral therapy considering binge eating remission, reduction of binge eating frequency and weight loss.</li> </ul>
<p>Peat (2017)</p> <p>Comparative Effectiveness of Treatments for Binge-Eating Disorder: Systematic Review and Network Meta-Analysis.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>A meta-analysis compared two pharmacological interventions (second-generation antidepressants versus lisdexamfetamine) and 26 psychological interventions for treatment of binge-eating disorder.</li> <li>Lisdexamfetamine was better at increasing binge abstinence than second-generation antidepressants; therapist-led cognitive behavioral therapy was better at reducing binge-eating frequency than behavioral weight loss, but behavioral weight loss was better at reducing weight.</li> <li>The majority of other treatment comparisons revealed few significant differences between groups.</li> </ul>
<p>Smith (2017)</p> <p>A review of purging disorder through meta-analysis.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>A meta-analysis compared purging disorder to other eating disorders (i.e., anorexia nervosa, bulimia nervosa, and binge eating disorder and controls).</li> <li>Results supported the notion of purging disorder as a clinically significant eating disorder, but findings were less clear regarding its distinctiveness from other eating disorder diagnoses.</li> <li>More specifically, purging disorder significantly differed from bulimia nervosa, and binge eating disorder in natural course of illness (<math>g = .40-.54</math>), and disorder significantly differed</li> </ul>

Citation	Content, Methods, Recommendations
	<p>from anorexia nervosa in treatment outcome (<math>g = .27</math>), with purging disorder characterized by a better prognosis.</p> <ul style="list-style-type: none"> <li>• Overall, purging disorder was more similar to anorexia nervosa and binge eating disorder on many dimensional measures of general and eating-related psychopathology, though purging disorder was less severe than bulimia nervosa in most of these domains.</li> <li>• The authors noted a need for future studies of purging disorder to assess validators that have not been reported previously such as mortality, medical morbidity, and course of illness.</li> </ul>
<p>Tchanturia (2017)</p> <p>Evidence for Cognitive Remediation Therapy in Young People with Anorexia Nervosa: Systematic Review and Meta-analysis of the Literature.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A systematic review and meta-analysis assessed the evidence for the safety and efficacy of cognitive remediation therapy in children and adolescent age groups with anorexia nervosa.</li> <li>• Cognitive remediation therapy for eating disorders demonstrated promising findings in adult age groups, with randomized treatment trials and systematic reviews demonstrating medium to large effect sizes in improved cognitive performance.</li> <li>• The authors noted improvements in cognitive performance with small effect sizes. Patient feedback was positive, with low dropout rates.</li> <li>• The findings suggest that cognitive remediation therapy has potential as a supplementary treatment for young people with anorexia nervosa.</li> </ul>
<p>Traviss-Turner (2017)</p> <p>Guided Self-help for Eating Disorders: A Systematic Review and Metaregression.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A systematic review and meta-analysis studied the effectiveness of guided self-help for reducing global eating disorder psychopathology and abstinence from binge eating, compared with controls.</li> <li>• Results showed an overall effect of guided self-help on global eating disorder psychopathology (-0.46) and binge abstinence (-0.20).</li> <li>• There was strong evidence for an association between diagnosis of binge eating disorder and binge abstinence.</li> <li>• The authors noted the limited effectiveness of guided self-help in children and young people, invariably high dropout rates and how technology can enhance interventions.</li> </ul>
<p>Williams (2017)</p> <p>Female Athlete Triad: Future Directions for Energy Availability and Eating Disorder Research and Practice.</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A narrative review recounts that low energy availability is the key etiologic factor in the female athlete triad, and that despite thirty years of research accurate screening, diagnosis, and treatment of the condition remains a challenge.</li> <li>• The female athlete triad is defined as low energy availability, menstrual dysfunction and low bone mineral density.</li> <li>• The authors advocated for more recent techniques (i.e., validated scoring tools, a more individualized approach to diagnosing and treating low energy availability combined with novel educational and behavior interventions) and guidance for clearance and return to play.</li> </ul>
<p>Seah (2016)</p> <p>Knowledge, Attitudes and Challenges of Healthcare Professionals Managing People With</p>	<p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• A systematic review identified healthcare professionals' knowledge and attitudes toward patients with eating disorders.</li> <li>• The authors identified factors like lack of knowledge or training as obstacles to proper care for persons with eating disorders.</li> <li>• Furthermore, the review suggested that the majority of healthcare professionals view patients</li> </ul>

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Eating Disorders: A Literature Review.	<p>with eating disorders in a negative manner, as “abnormal” or “different,” and these biases influence knowledge and attitude.</p> <ul style="list-style-type: none"> <li>• Patients were perceived to be able to control their own conditions, based on societal beliefs that body weight and shape are controlled by individuals.</li> <li>• Patients were also viewed as being in denial of their conditions, thus contributing to healthcare professionals' feelings of “helplessness” toward the patients.</li> </ul>

## **References**

### **Professional society guidelines/other:**

American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition: DSM-5*. Washington DC; APA Publishing, 2013.

### **Peer-reviewed references:**

Dingemans AE, Goorden M, Lötters FJB, et al. Development and Validation of a Decision Tool for Early Identification of Adult Patients with Severe and Complex Eating Disorder Psychopathology in Need of Highly Specialized Care. *Eur Eat Disord Rev*. 2017 Sep;25(5):366-372. doi: 10.1002/erv.2528. Epub 2017 Jun 29. PubMed PMID: 28660699.

Gosa MM, Carden HT, Jacks CC, Threadgill AY, Sidlovsky TC. Evidence to support treatment options for children with swallowing and feeding disorders: A systematic review. *J Pediatr Rehabil Med*. 2017 May 19;10(2):107-136. doi: 10.3233/PRM-170436. Review. PubMed PMID: 28582883.

Grenon R, Schwartze D, Hammond N, et al. Group psychotherapy for eating disorders: A meta-analysis. *Int J Eat Disord*. 2017 Sep;50(9):997-1013. doi: 10.1002/eat.22744. Epub 2017 Aug 3. Review. PubMed PMID:28771758.

Grilo CM. Psychological and Behavioral Treatments for Binge-Eating Disorder. *J Clin Psychiatry*. 2017;78 Suppl 1:20-24. doi: 10.4088/JCP.sh16003su1c.04. Review. PubMed PMID: 28125175.

Haleem DJ. Improving therapeutics in anorexia nervosa with tryptophan. *Life Sci*. 2017 Jun 1;178:87-93. doi: 10.1016/j.lfs.2017.04.015. Epub 2017 Apr 22. Review. PubMed PMID: 28438641.

Kazdin AE, Fitzsimmons-Craft EE, Wilfley DE. Addressing critical gaps in the treatment of eating disorders. *Int J Eat Disord*. 2017 Mar;50(3):170-189. doi:10.1002/eat.22670. Epub 2017 Jan 19. Review. PubMed PMID: 28102908.

Le LK, Barendregt JJ, Hay P, Mihalopoulos C. Prevention of eating disorders: A systematic review and meta-analysis. *Clin Psychol Rev*. 2017 Apr;53:46-58. doi: 10.1016/j.cpr.2017.02.001. Epub 2017 Feb 12. Review. PubMed PMID: 28214633.

Linardon J, Brennan L. The effects of cognitive-behavioral therapy for eating disorders on quality of life: A meta-analysis. *Int J Eat Disord*. 2017 Jul;50(7):715-730. doi: 10.1002/eat.22719. Epub 2017 Apr 21. Review. PubMed PMID: 28430364.

Nazar BP, Gregor LK, Albano G, et al. Early Response to treatment in Eating Disorders: A Systematic Review and a Diagnostic Test Accuracy Meta-Analysis. *Eur Eat Disord Rev*. 2017 Mar;25(2):67-79. doi: 10.1002/erv.2495. Epub 2016 Dec 7. Review. PubMed PMID: 27928853.

Palavras MA, Hay P, Filho CA, Claudino A. The Efficacy of Psychological Therapies in Reducing Weight and Binge Eating in People with Bulimia Nervosa and Binge Eating Disorder Who Are Overweight or Obese-A Critical Synthesis and Meta-Analyses. *Nutrients*. 2017 Mar 17;9(3). pii: E299. doi: 10.3390/nu9030299. Review. PubMed PMID: 28304341; PubMed Central PMCID: PMC5372962.

Peat CM, Berkman ND, Lohr KN, et al. Comparative Effectiveness of Treatments for Binge-Eating Disorder: Systematic Review and Network Meta-Analysis. *Eur Eat Disord Rev*. 2017 Sep;25(5):317-328. doi: 10.1002/erv.2517. Epub 2017 May 3. Review. PubMed PMID: 28467032.

Seah XY, Tham XC, Kamaruzaman NR, Yobas PK. Knowledge, Attitudes and Challenges of Healthcare Professionals Managing People With Eating Disorders: A Literature Review. *Arch Psychiatr Nurs*. 2017 Feb;31(1):125-136. doi:10.1016/j.apnu.2016.09.002. Epub 2016 Sep 7. Review. PubMed PMID: 28104050.

Smith KE, Crowther JH, Lavender JM. A review of purging disorder through meta-analysis. *J Abnorm Psychol*. 2017 Jul;126(5):565-592. doi:10.1037/abn0000243. Review. PubMed PMID: 28691846; PubMed Central PMCID: PMC5741973.

Tchanturia K, Giombini L, Leppanen J, Kinnaird E. Evidence for Cognitive Remediation Therapy in Young People with Anorexia Nervosa: Systematic Review and Meta-analysis of the Literature. *Eur Eat Disord Rev*. 2017 Jul;25(4):227-236. doi:10.1002/erv.2522. Review. PubMed PMID: 28573705.

Traviss-Turner GD, West RM, Hill AJ. Guided Self-help for Eating Disorders: A Systematic Review and Metaregression. *Eur Eat Disord Rev*. 2017 May;25(3):148-164. doi: 10.1002/erv.2507. Epub 2017 Mar 9. Review. PubMed PMID: 28276171.

Williams NI, Statuta SM, Austin A. Female Athlete Triad: Future Directions for Energy Availability and Eating Disorder Research and Practice. *Clin Sports Med*. 2017 Oct;36(4):671-686. doi: 10.1016/j.csm.2017.05.003. Epub 2017 Jul 10. Review. PubMed PMID: 28886821; PubMed Central PMCID: PMC5657497.

**CMS National Coverage Determinations (NCDs):**

No NCDs identified as of the writing of this policy.

**Local Coverage Determinations (LCDs):**

No LCDs identified as of the writing of this policy.

**Commonly submitted codes**

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

CPT Code	Description	Comments
90791-90792	Psychiatric diagnostic evaluation, without and with medical services	
90832-90838	Psychotherapy	
90836	Pharmacologic management, including prescription and review of medication, when performed with psychotherapy services (List separately in addition to the code for primary procedure)	
96101-96103	Psychological testing	
96150-96151	Health and behavior assessment or re-assessment	
96152-96155	Health and behavior intervention	

ICD-10 Code	Description	Comments
F50.00- F50.02	Anorexia nervosa	
F50.2	Bulimia nervosa	
F50.81	Binge eating disorder	
F50.82	Avoidant/restrictive food intake disorder	

HCPCS Level II Code	Description	Comments
N/A	Not applicable	