# GUIDELINE Open Access



# United States-based practice guidelines for children and adolescents with eating disorders

# Synthesis of clinical practice guidelines

Cara Bohon<sup>1,2\*</sup>, Daniel Le Grange<sup>3,4</sup>, Evelyn Attia<sup>5,6</sup>, Neville H. Golden<sup>7</sup> and Dori Steinberg<sup>1</sup>

# **Abstract**

**Introduction** Several practice guidelines exist from professional organizations in the United States to support the assessment and management of eating disorders in children and adolescents. This manuscript synthesizes the key areas of overlap from these guidelines and provides directions for future research and alignment to improve care.

**Recommendations** Consistent screening for eating disorders in primary care is recommended to ensure early identification and referral to treatment. Outpatient treatment supported by families, including family based treatment, is the first line of care recommended by guidelines. Multidisciplinary treatment teams benefit patients in covering the variety of aspects of health that eating disorders impact, including mental health, nutritional health, and physical health. Patients may require hospitalization under certain medical criteria such as bradycardia or specific lab abnormalities.

**Conclusions** Guidelines show consensus on the importance of early identification and treatment access, involvement of family in treatment, and the use of a multidisciplinary treatment team. However, future work is needed to guide care of Avoidant/Restrictive Food Intake Disorder (ARFID), as well as the impact of weight inclusive care and the development of validated screening tools for children and adolescents for all eating disorders.

# Plain english summary

Several professional organizations in the U.S. provide guidelines for assessing and treating eating disorders in children and adolescents. This paper highlights key areas of agreement across these guidelines and suggests future research directions.

# **Key Recommendations**

- Primary care providers should routinely screen for eating disorders to enable early detection and treatment referrals
- Outpatient care, particularly family-based treatment, is the preferred first-line approach.
- Multidisciplinary treatment teams that include therapists, dieticians, and medical professionals are essential for comprehensive care.

\*Correspondence: Cara Bohon cara@equip.health

Full list of author information is available at the end of the article



© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

Hospitalization may be necessary for patients with severe medical complications.

**Keywords** Eating disorders, Practice guidelines, Anorexia nervosa, Bulimia nervosa, Binge eating disorder, Avoidant/restrictive food intake disorder

### Introduction

Thirty million Americans will have an eating disorder (ED) during their lifetime [1]. EDs have high morbidity and mortality rates [2], and onset generally occurs during adolescence [3]. Early identification and referral to evidence-based treatments leads to improved outcomes [4–6].

# Methods of guideline development

Several professional organizations in the United States (US) developed guidelines that address the identification and management of EDs in children and adolescents. These are the American Psychiatric Association (APA) [7], the Society for Adolescent Health and Medicine (SAHM) [8], the American Academy of Pediatrics (AAP) [9], and the American Academy for Child and Adolescent Psychiatry (AACAP) [10]. In June 2023, The Kennedy Forum and Equip Health brought together leaders from these organizations and other stakeholders, such as health systems, payors, policy advocates, and individuals with lived experience with an ED for a summit to review current guidelines and align on opportunities for future areas of research. Below we synthesize the guidelines from these organizations as presented at this summit, supplemented with recommendations for future research that arose during the summit, summarized by the authors. We first summarize the recommendations within the published guidelines and then provide the subsequent recommendations thereafter.

# **Guideline recommendations**

Screening of EDs should occur regularly All practice guidelines address screening and referral for treatment for children and adolescents. AAP recommends that pediatricians screen for EDs during all annual health visits [9], and SAHM emphasizes the importance of early identification and management without specificity for timing of screening [8]. APA and AACAP recommend screening for the presence of an eating disorder as part of every initial psychiatric evaluation regardless of age or presenting problem [10]. While the US Preventive Services Task Force found insufficient evidence to support routine screening for EDs in asymptomatic adolescents and young adults, there is general consensus that medical providers should suspect the diagnosis of an ED in the presence of significant weight deviations (using growth curve data), presence of disordered eating behaviors such as restricting, purging, binge eating, or food avoidance, presence of amenorrhea, exercise-related injuries (e.g.,

stress fractures), lab abnormalities (e.g., hypokalemia), or low resting heart rate (HR < 50) [7, 8, 10, 11].

>Outpatient treatment should be the first-line treatment for most patients Guidelines recommend patients should be treated in the least restrictive setting that can appropriately address medical and co-occurring needs [7, 8, 10, 11]. For most patients, outpatient treatment is the appropriate first-line treatment; however, for some patients, higher levels of care (partial hospital programs, residential treatment, hospital admission, etc.) may be needed as an initial treatment. All guidelines are aligned for when higher levels of care are needed and provide criteria for when hospital-based treatment may be indicated for medical complications and/or severe co-occurring psychiatric conditions [7, 8, 10, 11]. Pharmacological interventions should be used primarily for comorbid conditions, as existing randomized controlled trials of psychotropic medications for eating disorders have been conducted in adult samples [7, 8, 10, 11].

Treatment is aimed at medical stabilization and normalization of eating behaviors In some patients with vital sign instability, electrolyte disturbances, ECG abnormalities or severe malnutrition, hospitalization for acute medical stabilization is needed and guidelines from the different organizations are in general agreement regarding factors justifying medical hospitalization. Treatment next prioritizes normalization of eating behaviors as the primary means of restoring physical and mental health. The specific treatment approach will depend on the patient's diagnosis. However, some patients will require weight restoration and nutritional rehabilitation including increases in the quantity, frequency and/or variety of dietary intake. As a best-practice for relapse prevention, most patients require ongoing ED-informed treatment following several months of sustained weight recovery and/or cessation of ED behaviors [7].

Family-based treatment (FBT) has the strongest evidence base in children and adolescents All guidelines state evidence-based treatments should be employed and specifically recommend FBT for youth with anorexia nervosa (AN) or bulimia nervosa (BN). Emerging evidence suggests that FBT may also be helpful in treating avoidant/restrictive food intake disorder (ARFID) and binge eating disorder (BED) [12–14]. Cognitive behavioral therapy (CBT) and dialectical behavioral therapy (DBT)

**Table 1** Points for the assessment and management of eating disorders as stated by the Society for Adolescent Health and Medicine (SAHM) in 2022, American Psychiatric Association (APA) in 2023, the American Academy of Pediatrics (AAP) in 2021, and the American Academy for Child and Adolescent Psychiatry (AACAP) in 2015

(2025) 13:66

	SAHM	APA	AAP	AACAP
Outpatient is first line unless clinically indicated	Х	X		Х
Specific lab and diagnostic tests recommended		X	X	X
Clinical assessments are necessary to determine level of care	Χ	Χ		
Provides specific factors supporting hospitalization	Χ	Χ	Χ	X
Treatment plan should be determined		Χ		
Provides pharmacological guidance		Χ	Χ	X
Outcomes need to be measured to determine effectiveness		Χ		
Multidisciplinary care teams	Χ	X	X	X
Coordination of care	Χ	X	X	
Weekly weight gain goals and/or overall target weight goals for those that need weight restoration	Χ	X		
Employ evidence-based treatments (e.g., FBT for adolescents)	Χ	X	X	X
Family involvement for adolescents with AN and BN	Χ	X	X	X
Screening for the presence of an eating disorder as part of an initial evaluation	Χ	X	X	X

SAHM=Society for Adolescent Health and Medicine, APA=American Psychiatric Association, AAP=American Academy of Pediatrics, AACAP=American Academy for Child and Adolescent Psychiatry, FBT=family-based treatment, AN=anorexia nervosa, BN=bulimia nervosa

are described as potential adjunctive modalities for older adolescents and young adults [15].

Target (or treatment goal) weight range should be individualized ED treatment goals for those who are at a low weight often include weight restoration, for which providers must set a goal weight range for recovery. Most guidelines acknowledge that EDs occur across the weight spectrum and cite the limitations of using the readily measurable absolute body mass index (BMI) to determine target weight, especially in children and adolescents [7, 8, 10, 11]. APA guidelines in particular discuss how BMI does not measure body composition or account for racial and sex differences [7]. For children and adolescents, BMI percentile from growth charts should be used and target weight range determination should be guided by individual growth charts, stage of pubertal development and growth trajectory, and could be higher or lower than median BMI.

Comorbidities should be treated concurrently Eating disorders frequently co-occur with anxiety disorders, mood disorders, obsessive-compulsive and related disorders, trauma and stress related disorders, and substance-use disorders [9]. Symptoms of depression and anxiety may ameliorate after full nutritional rehabilitation and sustained weight recovery [7, 16]. However, as co-occurring disorders can trigger or exacerbate ED symptoms, all practice guidelines recommend treating comorbidities utilizing evidence-based treatments [17].

**Multidisciplinary care teams are recommended** EDs are multi-system illnesses requiring multidisciplinary care, as recommended across all guidelines. Team mem-

bers may include a mental health provider, a medical provider, psychiatrist, and a registered dietitian [8].

#### Summary and considerations for future research

The synthesis of US-based ED practice guidelines, indicates much consensus across organizations in the treatment of EDs for children and adolescents. However, practice guidelines are guided by currently available research, and we outline several areas below that warrant further study.

Standards for screening The importance of screening in primary care settings was specified across guidelines; however, no validated screening tools exist for children and adolescents. Further, the US Services Preventive Task Force evaluated the 'balance of benefits and harms' for adult and adolescent screening across conditions, and evidence was deemed insufficient to make a determination for eating disorders [18]. Thus, the evidence statement is not a recommendation for or against screening, but rather that there is insufficient evidence to make a recommendation [19]. Moreover, primary care providers are often the first point of contact, yet physician training to recognize an ED is limited at best, particularly in non-stereotypical presentations of EDs [20]. Future research on best screening tools for children and adolescents is vital to ensure primary care providers have optimal tools and recommendations for best practice. Additionally, research on the best approach for implementation of screening into clinical practices will be valuable.

Ensure care is culturally relevant for marginalized groups, non-stigmatizing, and considers social determinants of health Individuals from marginalized groups such as individuals who identify as Black, Indigenous, and

people of color or LGBTQ+, and cisgender boys and men have EDs at equal or greater rates compared with white, cisgender girls, yet they receive care at lower rates and are more likely to leave treatment early [1]. Both diagnostic and treatment studies need more diverse representation [21], so that guidelines can make inclusive statements on treatments. Factors related to stigma or social determinants of health also place patients at risk of care disparities. Issues include patient reluctance to report symptoms, failure of patients and providers to recognize symptoms as an ED, limitations of public insurance, underrepresentation of diverse providers, financial and geographic barriers, and lack of access to trained specialists. Future guidelines should include the impact of these issues on ED identification and treatment.

Address weight stigma and ensure weight-inclusive

care The prototypical image of a patient with an ED is someone presenting with anorexia nervosa who is at a very low weight. Consequently, although EDs occur across the weight spectrum, patients at higher weights are less likely to receive timely diagnosis and treatment. Similarly, illness severity is more accurately reflected by the relative amount, duration, and rapidity of weight loss rather than by a low body weight [22–24]. Clinicians should assess the degree of recent weight loss because medical complications (e.g., refeeding syndrome) are predicted by both the rapidity and total magnitude of weight loss [22, 25]. Additional studies are needed to inform recommendations for level of care and medical interventions for individuals with severe illness at higher weights.

ARFID warrants specific treatment guidelines The diagnosis avoidant/restrictive food intake disorder (ARFID) was added to the Diagnostic Statistical Manual-Fifth Edition (DSM-5) list of Feeding and Eating Disorders in 2013<sup>3</sup>. The prevalence of ARFID, which typically has its onset in childhood [26], is similar to other wellknown diagnoses (AN, BN), and current long-term outcomes for malnourished patients with ARFID are similar to childhood-onset AN [27]. Patients often present with longstanding malnutrition, with one-third requiring hospitalization [28]. Most guidelines offer minimal direction for ARFID as there were few or no treatment trials at the time the guidelines were written. Studies are now underway that will allow guidelines to include more detailed information for medical providers on differentiating between ARFID symptoms versus 'age-appropriate' picky eating behaviors. Treatment of comorbid psychiatric issues also needs to be addressed, as the majority of patients with ARFID present with at least one comorbidity [26]. Research is also needed on advances in pharmacological, nutrition, and therapeutic modalities for ARFID.

In sum, while there is much consensus across existing US practice guidelines prioritizing early outpatient, evidence-based treatment, such as FBT, and using individualized target weights as treatment goals, there are still important gaps to be addressed in future versions.

#### **Author contributions**

All authors contributed to the content of the synthesis. CB and DS wrote initial drafts, and all authors edited and approved the final manuscript.

#### Fundina

The Summit for which this work was initiated and funded as a partnership between The Kennedy Forum and Equip Health. No other support was provided.

#### Data availability

No datasets were generated or analysed during the current study.

#### **Declarations**

#### Ethics approval and consent to participate

Not applicable

#### Consent for publication

Not applicable.

#### **Competing interests**

CB and DS received salary and equity from Equip Health during the preparation of this manuscript. DLG is co-director of the Training Institute for Child and Adolescent Eating Disorders, LLC, receives funding and equity from Equip Health, and receives royalties from Guildford Press and Routledge. EA received equity from Equip Health. EA and NG were members of the APA Practice Guideline Writing Group and NG was an author on the SAHM Guideline.

#### **Author details**

<sup>1</sup>Equip Health, Carlsbad, CA, USA

<sup>2</sup>Department of Psychiatry and Behavioral Sciences, Stanford University, Stanford, CA, USA

<sup>3</sup>Department of Psychiatry and Behavioral Sciences, University of California, San Francisco, San Francisco, CA, USA

<sup>4</sup>Department of Psychiatry and Behavioral Neuroscience (Emeritus), The University of Chicago, Chicago, IL, USA

<sup>5</sup>Department of Psychiatry, Columbia University Medical Center, New York. NY. USA

 $^6\mathrm{Department}$  of Psychiatry, Weill Cornell Medical College, New York, NY, USA

<sup>7</sup>Department of Pediatrics, Division of Adolescent Medicine, Stanford University, Stanford, CA, USA

Received: 18 February 2025 / Accepted: 30 March 2025 Published online: 11 April 2025

#### References

- Deloitte Access Economics. The Social and Economic Cost of Eating Disorders in the United States of America: A Report for the Strategic Training Initiative for the Prevention of Eating Disorders and the Academy for Eating Disorders. 2020. Accessed November 23, 2021. https://www.hsph.harvard.edu/striped/report-economic-costs-of-eating-disorders/
- Chesney E, Goodwin GM, Fazel S. Risks of all-cause and suicide mortality in mental disorders: a meta-review. World Psychiatry. 2014;13(2):153–60. https://doi.org/10.1002/wps.20128.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. Fifth edition. American Psychiatric Association; 2013. https://doi.or q/10.1176/appi.books.9780890425596.
- Ambwani S, Cardi V, Albano G, et al. A multicenter audit of outpatient care for adult anorexia nervosa: symptom trajectory, service use, and evidence

- in support of early stage versus severe and enduring classification. Int J Eat Disord. 2020;53(8):1337–48. https://doi.org/10.1002/eat.23246.
- Austin A, Flynn M, Richards K, et al. Duration of untreated eating disorder and relationship to outcomes: A systematic review of the literature. Eur Eat Disord Rev. 2021;29(3):329–45. https://doi.org/10.1002/erv.2745.
- Swanson SA, Crow SJ, Le Grange D, Swendsen J, Merikangas KR. Prevalence and correlates of eating disorders in adolescents: results from the National comorbidity survey replication adolescent supplement. Arch Gen Psychiatry. 2011;68(7):714–23. https://doi.org/10.1001/archgenpsychiatry.2011.22.
- American Psychiatric Association. The American psychiatric association practice guideline for the treatment of patients with eating disorders. American Psychiatric Pub: 2023.
- Society for Adolescent Health and Medicine. Medical management of restrictive eating disorders in adolescents and young adults. J Adolesc Health Off Publ Soc Adolesc Med. 2022;71(5):648–54. https://doi.org/10.1016/j.jadohealt h.2022.08.006.
- American Academy of Pediatrics. Identification and Management of Eating Disorders in Children and Adolescents. Published 2021. Accessed May 11. 2023. https://publications.aap.org/pediatrics/article/147/1/e2020040279/335 04/Identification-and-Management-of-Eating-Disorders?autologincheck=redirected
- American Academy of Child and Adolescent Psychiatry. Practice Parameter for the Assessment and Treatment of Children and Adolescents with Eating Disorders. Accessed May 11. 2023. http://www.jaacap.com/article/S0890–856 7(15)00070–2/pdf
- Hornberger LL, Lane MA, Committee on Adolescence. Identification and management of eating disorders in children and adolescents. Pediatrics. 2021;147(1):e2020040279. 10.1542/peds.2020-040279.
- Baker JH, Temes E, Bohon C, Derenne J, Duvall A, Steinberg D. Enhanced Family-Based treatment for an adolescent with Binge-Eating disorder: A case report. Cogn Behav Pract Published Online Febr. 2023;13. https://doi.org/10.1 016/j.cbpra.2022.12.001.
- Bohon C. Binge eating disorder in children and adolescents. Child Adolesc Psychiatr Clin N Am. 2019;28(4):549–55. https://doi.org/10.1016/j.chc.2019.05. 003
- Lock J, Robinson A, Sadeh-Sharvit S, et al. Applying family-based treatment (FBT) to three clinical presentations of avoidant/restrictive food intake disorder: similarities and differences from FBT for anorexia nervosa. Int J Eat Disord. 2019;52(4):439–46. https://doi.org/10.1002/eat.22994.
- Reilly EE, Orloff NC, Luo T, et al. Dialectical behavioral therapy for the treatment of adolescent eating disorders: a review of existing work and proposed future directions. Eat Disord. 2020;28(2):122–41. https://doi.org/10.1080/1064 0266.2020.1743098.
- Meehan KG, Loeb KL, Roberto CA, Attia E. Mood change during weight restoration in patients with anorexia nervosa. Int J Eat Disord. 2006;39(7):587–9. htt ps://doi.org/10.1002/eat.20337.
- Hilbert A, Hoek HW, Schmidt R. Evidence-based clinical guidelines for eating disorders: international comparison. Curr Opin Psychiatry. 2017;30(6):423–37. https://doi.org/10.1097/YCO.00000000000360.

- US Preventive Services Task Force. Screening for eating disorders in adolescents and adults: US preventive services task force recommendation statement. JAMA. 2022;327(11):1061–7. https://doi.org/10.1001/jama.2022.1806.
- Nagata JM, Golden NH. New US preventive services task force recommendations on screening for eating disorders. JAMA Intern Med. 2022;182(5):471–3. https://doi.org/10.1001/jamainternmed.2022.0121.
- Sim LA, McAlpine DE, Grothe KB, Himes SM, Cockerill RG, Clark MM. Identification and Treatment of Eating Disorders in the Primary Care Setting. Mayo Clin Proc. 2010;85(8):746–751. https://doi.org/10.4065/mcp.2010.0070
- 21. Goel NJ, Jennings Mathis K, Egbert AH, et al. Accountability in promoting representation of historically marginalized Racial and ethnic populations in the eating disorders field: A call to action. Int J Eat Disord. 2022;55(4):463–9. h ttps://doi.org/10.1002/eat.23682.
- Garber AK, Cheng J, Accurso EC, et al. Weight loss and illness severity in adolescents with atypical anorexia nervosa. Pediatrics. 2019;144(6):e20192339. 10.1542/peds.2019–2339.
- Golden NH, Yang W, Jacobson MS, Robinson TN, Shaw GM. Expected body weight in adolescents: comparison between weight-for-stature and BMI methods. Pediatrics. 2012;130(6):e1607–1613. 10.1542/peds.2012–0897.
- Matthews A, Gordon K, Kramer R, Lin J, Ziv A. Clinical characteristics of medically hospitalized youth with anorexia nervosa/atypical anorexia nervosa and premorbid overweight/obesity. Eat Disord. 2023;31(3):201–11. https://doi.org /10.1080/10640266.2022.2097361.
- Whitelaw M, Lee KJ, Gilbertson H, Sawyer SM. Predictors of complications in anorexia nervosa and atypical anorexia nervosa: degree of underweight or extent and recency of weight loss?? J Adolesc Health. 2018;63(6):717–23. http s://doi.org/10.1016/j.jadohealth.2018.08.019.
- Sanchez-Cerezo J, Nagularaj L, Gledhill J, Nicholls D. What do we know about the epidemiology of avoidant/restrictive food intake disorder in children and adolescents? A systematic review of the literature. Eur Eat Disord Rev J Eat Disord Assoc. 2023;31(2):226–46. https://doi.org/10.1002/erv.2964.
- Lange CRA, Ekedahl Fjertorp H, Holmer R, Wijk E, Wallin U. Long-term followup study of low-weight avoidant restrictive food intake disorder compared with childhood-onset anorexia nervosa: psychiatric and occupational outcome in 56 patients. Int J Eat Disord. 2019;52(4):435–8. https://doi.org/10. 1002/eat.23038.
- Norris ML, Robinson A, Obeid N, Harrison M, Spettigue W, Henderson K. Exploring avoidant/restrictive food intake disorder in eating disordered patients: A descriptive study. Int J Eat Disord. 2014;47(5):495–9. https://doi.org/10.1002/eat.22217.

#### Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.