



General

Guideline Title

Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder.

Bibliographic Source(s)

Volkmar F, Siegel M, Woodbury-Smith M, King B, McCracken J, State M, American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. *J Am Acad Child Adolesc Psychiatry*. 2014 Feb;53(2):237-57. [164 references] [PubMed](#)

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: American Academy of Child and Adolescent Psychiatry. Practice parameters for the assessment and treatment of children, adolescents, and adults with autism and other pervasive developmental disorders. American Academy of Child and Adolescent Psychiatry Working Group on Quality Issues. *J Am Acad Child Adolesc Psychiatry*. 1999 Dec;38(12 Suppl):55S-76S. [173 references]

Recommendations

Major Recommendations

Definitions of the strength of the empirical and/or clinical support ratings (CS, CG, OP, NE) are provided at the end of the "Major Recommendations" field.

Assessment

Recommendation 1. The developmental assessment of young children and the psychiatric assessment of all children should routinely include questions about autism spectrum disorder (ASD) symptomatology [CS].

Screening should include inquiries about the core symptoms of ASD, including social relatedness and repetitive or unusual behaviors. Screening instruments have been developed that may be helpful to the clinician. Some of these instruments are completed by clinicians and others by primary caregivers (see Table 1 in the original guideline document). Screening is applicable to young children and to infants, when the diagnosis may first be considered. In some instances, screening may be relevant to older children, e.g., those who are more intellectually able and whose social disability is therefore more likely

to be detected later.

Recommendation 2. If the screening indicates significant ASD symptomatology, a thorough diagnostic evaluation should be performed to determine the presence of ASD [CS].

Currently, biological diagnostic markers are not available and diagnosis rests on careful examination of the child. A standard psychiatric assessment should be followed, including interviews with the child and family and a review of past records and historical information. The history and examination should be conducted with careful consideration of *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* diagnostic criteria. Although the *DSM-5* criteria are intended to be independent of age and intellect, the diagnosis of autism in infants and very young children is more challenging, and some features (e.g., stereotyped movements) may develop later. Systematic attention to the areas relevant to differential diagnosis is essential. Information on the nature of changes over the course of development, e.g., in response to intervention, is helpful. The history should include a review of past and current educational and behavioral interventions and information regarding family history and relevant psychosocial issues. Consideration of possible comorbid diagnoses is an important focus of assessment.

Observation of the child should focus on broad areas of social interaction and restricted, repetitive behaviors. The child's age and developmental level may dictate some modification in assessment procedures. Clinicians should be sensitive to ethnic, cultural, or socioeconomic factors that may affect assessment.

Various instruments for the assessment of ASD have been developed (see Table 1 in the original guideline document). As a practical matter, all these instruments vary in their usefulness for usual clinical practice. Some require specific training. The use of such instruments supplements, but does not replace, informed clinical judgment.

Recommendation 3. Clinicians should coordinate an appropriate multidisciplinary assessment of children with ASD [CS].

All children with ASD should have a medical assessment, which typically includes physical examination, a hearing screen, a Wood's lamp examination for signs of tuberous sclerosis, and genetic testing, which may include G-banded karyotype, fragile X testing, or chromosomal microarray. In a community sample of children with ASD, diagnostic yields were 2.5% for karyotype testing, 0.57% for fragile X testing, and 24% for chromosomal microarray. Chromosomal microarray has been recommended by medical geneticists as the standard of care for the initial evaluation of children with developmental disabilities and/or ASDs. These tests currently detect known abnormalities clearly associated with increased rates of ASD (e.g., 15q11-13 maternal duplications and duplications and deletions of chromosome 16p11.2) and genetic variations of uncertain significance. Recent data from a study of families with only a single affected child have shown that lower IQ is not a strong predictor of a positive chromosomal finding. Any abnormal or indeterminate result from such a study warrants referral for further genetic evaluation and counseling. The yield of genetic testing in the presence of clinical suspicion is currently in the range of at least one third of cases.

Unusual features in the child (e.g., history of regression, dysmorphology, staring spells, family history) should prompt additional evaluations. The list of potential organic etiologies is large but falls into the categories of infectious (e.g., encephalitis or meningitis), endocrinologic (e.g., hypothyroidism), metabolic (e.g., homocystinuria), traumatic (e.g., head injury), toxic (e.g., fetal alcohol syndrome), or genetic (e.g., chromosomal abnormality). Certain developmental disorders, most notably Landau-Kleffner syndrome, also should be ruled out. In this condition, a highly distinctive electroencephalogram (EEG) abnormality is present and associated with development of a marked aphasia. Genetic or neurologic consultation, neuroimaging, EEG, and additional laboratory tests should be obtained when relevant, based on examination or history (e.g., testing for the *MeCP2* gene in cases of possible Rett's disorder).

Psychological assessment, including measurements of cognitive ability and adaptive skills, is indicated for treatment planning and helps to frame observed social-communication difficulties relative to overall development. The results of standard tests of intelligence may show considerable scatter. Unusual islets

of ability ("splinter skills") may be present. For children with autism, these sometimes take the form of unusual ability ("savant skills"), e.g., the ability to produce intricate drawings or engage in calendar calculations. For higher functioning children, areas of special interest are often present and the single-minded pursuit of these interests may interfere with the child's ability to learn. Psychological tests clarify areas of strength and weakness useful in designing intervention programs and may need to include instruments valid for a nonverbal population.

Communication assessment, including measurements of receptive and expressive vocabulary and language use (particularly social or pragmatic), is helpful for diagnosis and treatment planning. Occupational and physical therapy evaluations may be needed to evaluate sensory and/or motor difficulties. Sleep is an important variable to assess in individuals with ASD. When members of multiple disciplines are involved in assessment, it is optimal that coordination occur among the various professionals.

Treatment

Recommendation 4. The clinician should help the family obtain appropriate, evidence-based, and structured educational and behavioral interventions for children with ASD [CS].

Structured educational and behavioral interventions have been shown to be effective for many children with ASD and are associated with better outcome. As summarized in the National Research Council report, the quality of the research literature in this area is variable, with most studies using group controls or single-subject experimental methods. In general, studies using more rigorous randomized group comparisons are sparse, reflecting difficulties in random assignment and control comparisons. Other problems include lack of attention to subject characterization, generalization of treatment effects, and fidelity of treatment implementation. Despite these problems, various comprehensive treatments approaches have been shown to have efficacy for groups of children, although none of the comprehensive treatment models has clearly emerged as superior.

Behavioral

Behavioral interventions such as Applied Behavioral Analysis (ABA) are informed by basic and empirically supported learning principles. A widely disseminated comprehensive ABA program is Early Intensive Behavioral Intervention for young children, based on the work of Lovaas et al., 1981. Early Intensive Behavioral Intervention is intensive and highly individualized, with up to 40 hours per week of one-to-one direct teaching, initially using discrete trials to teach simple skills and progressing to more complex skills such as initiating verbal behavior. A meta-analysis found Early Intensive Behavioral Intervention effective for young children but stressed the need for more rigorous research to extend the findings. Behavioral techniques are particularly useful when maladaptive behaviors interfere with the provision of a comprehensive intervention program. In such situations, a functional analysis of the target behavior is performed, in which patterns of reinforcement are identified and then various behavioral techniques are used to promote a desired behavioral alternative. ABA techniques have been repeatedly shown to have efficacy for specific problem behaviors, and ABA has been found to be effective as applied to academic tasks, adaptive living skills, communication, social skills, and vocational skills. Because most children with ASD tend to learn tasks in isolation, an explicit focus on generalization is important.

Communication

Communication is a major focus of intervention and typically will be addressed in the child's individualized educational plan in coordination with the speech-language pathologist. Children who do not yet use words can be helped through the use of alternative communication modalities, such as sign language, communication boards, visual supports, picture exchange, and other forms of augmentative communication. There is some evidence for the efficacy of the Picture Exchange Communication System, sign language, activity schedules, and voice output communication aids. For individuals with fluent speech, the focus should be on pragmatic language skills training. Children and adolescents with fluent speech may, for example, be highly verbal but have severely impaired pragmatic language skills that can be addressed through explicit teaching. Many programs to enhance social reciprocity and pragmatic

language skills are currently available (see Table 2 in the original guideline document).

Educational

There is consensus that children with ASD need a structured educational approach with explicit teaching. Programs shown to be effective typically involve planned, intensive, individualized intervention with an experienced, interdisciplinary team of providers, and family involvement to ensure generalization of skills. The educational plan should reflect an accurate assessment of the child's strengths and vulnerabilities, with an explicit description of services to be provided, goals and objectives, and procedures for monitoring effectiveness. Although the curricula used vary across programs, they often share goals of enhancing verbal and nonverbal communication, academic skills, and social, motor, and behavioral capabilities. In some instances, particularly for younger children, a parent-education and home component may be important. Development of an appropriate individualized educational plan is central in providing effective service to the child and family. Efficacy has been shown for two of the structured educational models, the Early Start Denver Model and the Treatment and Education of Autism and related Communication handicapped Children program, but significant challenges remain in disseminating knowledge about effective interventions to educators.

Other Interventions

There is a lack of evidence for most other forms of psychosocial intervention, although cognitive behavioral therapy has shown efficacy for anxiety and anger management in high functioning youth with ASD. Studies of sensory oriented interventions, such as auditory integration training, sensory integration therapy, and touch therapy/massage, have contained methodologic flaws and have yet to show replicable improvements. There is also limited evidence thus far for what are usually termed developmental, social-pragmatic models of intervention, such as Developmental-Individual Difference-Relationship Based/Floortime, Relationship Development Intervention, Social Communication Emotional Regulation and Transactional Support, and Play and Language for Autistic Youths, which generally use naturalistic techniques in the child's community setting to develop social communication abilities. Children with ASD are psychiatrically hospitalized at substantially higher rates than the non-ASD child population. The efficacy of this intervention is unknown, although there is preliminary evidence for the efficacy of hospital psychiatry units that specialize in the population.

Recommendation 5. Pharmacotherapy may be offered to children with ASD when there is a specific target symptom or comorbid condition [CG].

Pharmacologic interventions may increase the ability of persons with ASD to profit from educational and other interventions and to remain in less restrictive environments through the management of severe and challenging behaviors. Frequent targets for pharmacologic intervention include associated comorbid conditions (e.g., anxiety, depression) and other features, such as aggression, self-injurious behavior, hyperactivity, inattention, compulsive-like behaviors, repetitive or stereotypic behaviors, and sleep disturbances. As with other children and adolescents, various considerations should inform pharmacologic treatment. Risperidone and aripiprazole have been approved by the Food and Drug Administration for the treatment of irritability, consisting primarily of physical aggression and severe tantrum behavior, associated with autism. There is a growing body of controlled evidence for pharmacologic intervention, and a summary of randomized controlled trials of medication in children with ASD is included (see Table 3 in the original guideline document). Combining medication with parent training is moderately more efficacious than medication alone for decreasing serious behavioral disturbance and modestly more efficacious for adaptive functioning. Individuals with ASD may be nonverbal, so treatment response is often judged by caregiver report and observation of specific behaviors. Although this may help document the effectiveness of the selected medication, one must remember that an overall goal of treatment is to facilitate the child's adjustment and engagement with educational intervention. Several objective rating scales also are available to help monitor treatment response.

Recommendation 6. The clinician should maintain an active role in long-term treatment planning and family support and support of the individual [CG].

Children's and families' need for help and support will change over time. The clinician should develop a long-term collaboration with the family and realize that service utilization may be sporadic. For very young children, issues of diagnosis and identification of treatment programs often will be most important. For school-age children, psychopharmacologic and behavioral issues typically become more prominent. For adolescents, vocational and prevocational training and thoughtful planning for independence/self-sufficiency is important. As part of this long-term engagement, parents and siblings of children with ASD will need support (see Table 4 in the original guideline document). Although raising a child with autism presents major challenges, rates of parental separation and divorce are not higher among parents of children with ASD than those with non-ASD children.

Recommendation 7. Clinicians should specifically inquire about the use of alternative/complementary treatments and be prepared to discuss their risk and potential benefits [CS].

Although most alternative or complementary treatment approaches have very limited empirical support for their use in children with ASD, they are commonly pursued by families. It is important that the clinician be able to discuss these treatments with parents, recognizing the motivation for parents to seek all possible treatments. In most instances, these treatments have little or no proved benefit but also have little risk. In a few instances, the treatment has been repeatedly shown not to work (e.g., intravenous infusion of secretin and oral vitamin B6 and magnesium), or randomized controlled evidence does not support its use (e.g., the gluten-free, casein-free diet, ω -3 fatty acids, and oral human immunoglobulin). Some treatments have greater potential risk to the child directly (e.g., mortality and morbidity associated with chelation) or from side effects owing to contaminants in "natural" compounds or indirectly (e.g., by diverting financial or psychosocial resources). Although more controlled studies of these treatments are needed, it is important that the family be able to voice their questions to health care providers. Families may be guided to the growing body of work on evidence-based treatments in autism.

Definitions:

Strength of the Empirical and/or Clinical Support

Clinical standard [CS] is applied to recommendations that are based on rigorous empirical evidence (e.g., meta-analyses, systematic reviews, individual randomized controlled trials) and/or overwhelming clinical consensus.

Clinical guideline [CG] is applied to recommendations that are based on strong empirical evidence (e.g., nonrandomized controlled trials, cohort studies, case-control studies) and/or strong clinical consensus.

Clinical option [OP] is applied to recommendations that are based on emerging empirical evidence (e.g., uncontrolled trials or case series/reports) or clinical opinion but lack strong empirical evidence and/or strong clinical consensus.

Not endorsed [NE] is applied to practices that are known to be ineffective or contraindicated.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Autism spectrum disorder (ASD)

Guideline Category

Counseling

Diagnosis

Evaluation

Management

Screening

Treatment

Clinical Specialty

Family Practice

Neurology

Pediatrics

Psychiatry

Psychology

Intended Users

Allied Health Personnel

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Social Workers

Guideline Objective(s)

- To present a practice parameter for clinicians who care for children and adolescents (17 years of age or younger) with autism spectrum disorder (ASD)
- To update the previous version of this practice parameter and incorporate new research

Target Population

Children and adolescents (≤ 17 years of age) with or suspected of having autism spectrum disorder (ASD)

Interventions and Practices Considered

Assessment

Developmental and psychiatric assessment (including questions about autism spectrum disorder [ASD] symptomatology)

Thorough diagnostic evaluation (Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition [DSM-5] criteria)

Multidisciplinary assessment (physical examination, hearing screen, Wood's lamp examination for signs of tuberous sclerosis, and genetic testing)

Treatment

Appropriate, evidence-based, and structured educational, behavioral and communication interventions

Pharmacotherapy (for specific target symptom or comorbid condition)

Long-term treatment planning, family support, and support of the individual

Inquiry into the use of alternative/complementary treatments and discussion about their risks and benefits

Major Outcomes Considered

Improvement in autistic behavioral symptoms (e.g., hyperactivity, irritability, inappropriate speech, stereotypy, social withdrawal) as measured by standard rating scales and assessment instruments

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

The first version of this Parameter was published in 1999. For this revision, the literature search covered the period from 1991 to March 19, 2013 using the PubMed, PsycINFO, Cochrane, and CINAHL (EBSCO) databases. The initial searches were inclusive and sensitive. Search terms were a combination of medical subject headings (MeSH) headings and keywords, and the MeSH headings were adjusted to terms used by PsycINFO and CINAHL by using their thesauri.

In PubMed the MeSH terms *autistic disorder*, *childhood development disorders—pervasive*, *Asperger**, and *Rett** and the keyword *autism* were searched. The initial search yielded 20,807 results. Then, the results were limited to English, human, *all child (0 to 18 years)*, and 1991 to March 19, 2013. Additional limits included classic article, clinical trial, comparative study, controlled clinical trial, evaluation studies, guideline, historical article, meta-analysis, practice guideline, multicenter study, randomized controlled trial, review, twin study and validation studies. The refined PubMed search yielded 3,613 articles.

In the PsycINFO database subject headings (focused) of *autism*, *autistic thinking*, *pervasive developmental disorders*, *retts syndrome*, *aspergers*, and keyword *autism* were searched. The initial search returned 24,875 articles and was then limited to English, *childhood: birth to age 12 yrs*, *adolescence: age 13-17 yrs*, *peer reviewed journal*, and 1991 to March 19, 2013. The refined PsycINFO search yielded 9,583 articles. In the Cochrane Database of Systematic Reviews, keywords of *autism*, *autistic*, *rett**, *asperger**, or (*pervasive and disorder** and *develop**) were searched without additional limits. The Cochrane search yielded 95 articles. An additional 517 articles were retrieved from the CINAHL database, after excluding MEDLINE articles, by searching *autistic disorder*, *autism*, *asperger syndrome*, *child development disorders*, *pervasive*, and *rett syndrome*.

A total of 13,808 articles were identified and exported to the EndNote reference management program. After removing duplicate references, the resulting yield from the comprehensive search was 9,581 articles.

The titles and abstracts of all articles were reviewed. Studies were selected for full text review based on their place in the hierarchy of evidence (e.g., randomized controlled trials), quality of individual studies,

and generalizability to clinical practice. The search was augmented by review of articles nominated by expert reviewers and further search of article reference lists and relevant textbook chapters.

Number of Source Documents

A total of 186 articles were selected for full text examination.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

The strength of the empirical evidence is rated in descending order as follows:

[rct] Randomized controlled trial is applied to studies in which subjects are randomly assigned to at least 2 treatment conditions

[ct] Controlled trial is applied to studies in which subjects are nonrandomly assigned to at least 2 treatment conditions

[ut] Uncontrolled trial is applied to studies in which subjects are assigned to 1 treatment condition

[cs] Case series/report is applied to a case series or a case report

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

The strength of the empirical evidence is rated in descending order (see the "Rating Scheme for the Strength of the Evidence" field).

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

American Academy of Child and Adolescent Psychiatry (AACAP) Practice Parameters are developed by the AACAP Committee on Quality Issues (CQI) in accordance with American Medical Association policy. Parameter development is an iterative process between the primary author(s), the CQI, topic experts, and representatives from multiple constituent groups, including the AACAP membership, relevant AACAP committees, the AACAP Assembly of Regional Organizations, and the AACAP Council. Details of the Parameter development process can be accessed on the AACAP Web site. Responsibility for Parameter content and review rests with the author(s), the CQI, the CQI Consensus Group, and the AACAP Council.

The AACAP develops patient-oriented and clinician-oriented Practice Parameters. Patient-oriented Parameters provide recommendations to guide clinicians toward best assessment and treatment practices. Recommendations are based on the critical appraisal of empirical evidence (when available) and clinical consensus (when not) and are graded according to the strength of the empirical and clinical

support. Clinician-oriented Parameters provide clinicians with the information (stated as principles) needed to develop practice-based skills. Although empirical evidence may be available to support certain principles, principles are based primarily on clinical consensus. This Parameter is a patient-oriented Parameter.

Rating Scheme for the Strength of the Recommendations

Recommendations for best assessment and treatment practices are stated in accordance with the strength of the underlying empirical and/or clinical support.

Clinical standard [CS] is applied to recommendations that are based on rigorous empirical evidence (e.g., meta-analyses, systematic reviews, individual randomized controlled trials) and/or overwhelming clinical consensus.

Clinical guideline [CG] is applied to recommendations that are based on strong empirical evidence (e.g., nonrandomized controlled trials, cohort studies, case-control studies) and/or strong clinical consensus.

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Not endorsed [NE] is applied to practices that are known to be ineffective or contraindicated.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

This Practice Parameter was reviewed at the Member Forum at the American Academy of Child and Adolescent Psychiatry (AACAP) annual meeting in October 2006.

From March to June 2012, this Parameter was reviewed by a consensus group convened by the Committee on Quality Issues (CQI).

This Practice Parameter was approved by the AACAP Council on July 8, 2013.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Recommendations are based on the critical appraisal of empirical evidence (when available) and clinical consensus (when not), and are graded according to the strength of the empirical and clinical support.

Benefits/Harms of Implementing the Guideline

Recommendations

Potential Benefits

Accurate psychiatric diagnosis and appropriate treatment for children and adolescents with autism spectrum disorder (ASD)

Potential Harms

Pharmacological interventions may cause significant side effects, such as diarrhea, sedation, increased appetite, and increased aggression (see Table 3 in the original guideline document for more information).

Qualifying Statements

Qualifying Statements

American Academy of Child and Adolescent Psychiatry (AACAP) Practice Parameters are developed to assist clinicians in psychiatric decision making. These Parameters are not intended to define the sole standard of care. As such, the Parameters should not be deemed inclusive of all proper methods of care or exclusive of other methods of care directed at obtaining the desired results. The ultimate judgment regarding the care of a particular patient must be made by the clinician in light of all of the circumstances presented by the patient and his or her family, the diagnostic and treatment options available, and available resources.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Patient Resources

Staff Training/Competency Material

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

1999 Jun 27 (revised 2014 Feb)

Guideline Developer(s)

American Academy of Child and Adolescent Psychiatry - Medical Specialty Society

Source(s) of Funding

American Academy of Child and Adolescent Psychiatry

Guideline Committee

American Academy of Child and Adolescent Psychiatry Committee on Quality Issues (CQI)

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Financial Disclosures/Conflicts of Interest

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Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: American Academy of Child and Adolescent Psychiatry. Practice parameters for the assessment and treatment of children, adolescents, and adults with autism and other pervasive developmental disorders. American Academy of Child and Adolescent Psychiatry Working Group on Quality Issues. *J Am Acad Child Adolesc Psychiatry*. 1999 Dec;38(12 Suppl):55S-76S. [173 references]

Guideline Availability

Electronic copies: Available from the [American Academy of Adolescent and Child Psychiatry \(AACAP\) Web site](#) .

Availability of Companion Documents

The following is available:

Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. Continuing medical education (CME). 2014 Feb. Available to subscribers from the [Journal of the American Academy of Child and Adolescent Psychiatry Web site](#)

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Patient Resources

The following are available:

The child with autism. Facts for families. Washington (DC): American Academy of Child and Adolescent Psychiatry; 2013 Oct. Available from the [American Academy of Adolescent and Child Psychiatry \(AACAP\) Web site](#) .

Autism resource center. Washington (DC): American Academy of Child and Adolescent Psychiatry; 2013 Jul. Available from the [AACAP Web site](#) .

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better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

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