



PREFERRED PRACTICE GUIDELINES

Screening and Diagnosis of Autistic Disorder

Blue Cross Blue Shield Healthcare Plan of Georgia (BCBSHP) endorses the American Academy of Neurology's (AAN) Practice Parameter for the screening and diagnosis of Autistic Disorder. This disorder is an uncommon childhood disorder, affecting between 1 in 500 and 1 in 1000 children. However, it often remains unrecognized and undiagnosed until or after late preschool age because appropriate tools for routine developmental screening and screening specifically for Autistic Disorder have not been available and because of concerns about labeling or incorrectly diagnosing a child with this disorder.

Early screening and diagnosis of Autistic Disorder is essential in order to assist the child and the child's family with appropriate interventions and resources which may improve the long term prognosis.

BCBSHP recommends reviewing the references listed at the end of this document in full; however, the following is a summary:

Screening

AAN discusses two levels of investigations when screening children for Autistic Disorder. The first level is the "Routine Developmental Surveillance and Screening Specifically for Autistic Disorder." This should be performed on all children and involves identifying children at risk for atypical development followed by identifying those specifically at risk for Autistic Disorder. The second level is the "Diagnosis and Evaluation of Autistic Disorder," which involves a more in-depth evaluation of already identified children and differentiates between Autistic Disorder and other developmental disorders.

For Level 1, evaluating developmental milestones and noting any lack of acquisition of the milestones is imperative. Recommended screening tools include: the Ages and Stages Questionnaire, the BRIGANCE Screens, the Child Development Inventories and the Parents Evaluations of Developmental Status. Specific to screening for Autistic Disorder are: the Checklist for Autistic Disorder in Toddlers (CHAT) for 18-month-olds and the Autistic Disorder Screening Questionnaire for children 4 years of age and older which have been validated on large populations of children. Laboratory investigations should include a formal audiologic evaluation and lead screening.

For Level 2, the following evaluations should be conducted: medical/neurological evaluation, speech, language and communication evaluation and cognitive and adaptive behavior evaluation. Sensorimotor and occupational therapy evaluations,

neuropsychological, behavioral and academic assessments should be performed only as needed. Recommendations for diagnostic instruments include: The Gilliam Autistic Disorder Rating Scale, the Parent Interview for Autistic Disorder, the Pervasive Developmental Disorders Screening Test-Stage 3, the Childhood Autistic Disorder Rating Scale, the Screening Tool for Autistic Disorder for Two-Year-Olds and the Autistic Disorder Diagnostic Observation Schedule- Generic. These should only be used if the diagnosis is not clear from clinical evaluations. Only those tests that are necessary to confirm the diagnosis should be administered.

The American Academy of Pediatrics (AAP) also recommends using the Childhood Autistic Disorder Rating Scale, the Autistic Disorder Behavior Checklist, the Gilliam Autistic Disorder Rating Scale, the Autistic Disorder Diagnostic Interview-Revised and the Checklist for Autistic Disorder in Toddlers.

Diagnosis

According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM- IV), the essential features of Autistic Disorder include a markedly abnormal or impaired development in social interaction and communication and a markedly restricted repertoire of activity and interests. The impairment in reciprocal social interaction is gross and sustained. Problems with social interactions may include impairment in the use of nonverbal behaviors (eye-to-eye gaze, facial expression, body postures and gestures) to regulate social interaction and communication. There may be a failure to develop peer relationships, a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people, and/or lack of social or emotional reciprocity. Problems with communication may include delay in, or total lack of, the development of a spoken language, marked impairment in the ability to initiate or sustain a conversation (in individuals with adequate speech), stereotyped and repetitive use of language or idiosyncratic language, and/or a lack of varied, spontaneous make-believe play or social imitative play appropriate to the child's developmental level. Restricted repertoire of activity and interests may include a preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus, inflexible adherence to specific, nonfunctional routines or rituals, stereotyped and repetitive motor mannerisms and persistent preoccupation with parts of objects.

The differential diagnoses include Pervasive Developmental Disorder NOS, Asperger's Disorder, Rett's Disorder, Childhood Disintegrative Disorder, Selective Mutism, Expressive Language Disorder and Mental Retardation.

Treatment

Various treatment approaches have been described as helpful in the treatment of these disorders. The following have clinical evidence for their effectiveness:

Pharmacotherapy for management of co-morbidities related to Autistic Disorder, Asperger's Disorder, Rett's Disorder, Childhood Disintegrative Disorder and Pervasive Developmental Disorder (NOS) is considered appropriate when required for the treatment of mood disorders or other conditions where the potential for patients to harm themselves

or others is present, or when such treatment would otherwise be considered medically necessary.

Behavior modification for management of behavioral symptoms related to Autistic Disorder, Asperger's Disorder, Rett's Disorder and Pervasive Developmental Disorder is considered appropriate when required for the management of behaviors where the potential for patients to harm themselves or others is present, or when such treatment would otherwise be considered medically necessary. Family therapy to assist the parents in effectively managing their child's behavior is often helpful.

Interventions to improve verbal and nonverbal communication skills for patients with Autistic Disorder, Asperger's Disorder, Rett's Disorder and Pervasive Developmental Disorder, including, but not limited to, services rendered by a speech-language pathologist are considered appropriate when not otherwise provided by state or local educational services as required by law.

Physical and occupational therapy for co-morbid physical impairments in patients with Autistic Disorder, Asperger's Disorder, Rett's Disorder and Pervasive Developmental Disorder is considered appropriate when such treatment would otherwise be considered medically necessary.

At the present time, the research based evidence for the effectiveness of "Lovaas Therapy," Applied Behavioral Analysis (ABA) therapy, intensive behavioral intervention (IBI), discrete trial training, early intensive behavioral intervention (EIBI), or intensive intervention programs is insufficient to recommend these treatments. There has been particular interest and controversy around intensive behavioral therapy techniques for autism such as that described by Lovaas in 1987. He reported on a group of 19 patients younger than 46 months of age who received an intensive form of behavioral therapy involving 40 hours per week of one-on-one therapy and compared them to control groups receiving either less intense (less than 10 hours of one-to-one therapy per week) or no intensive therapy. The therapy consisted of operant treating techniques in which the child was given a task, and based on the child's response, received either reinforcement or "punishment." The treatment was provided by trained student therapists working together with the child's parents who were also trained in the techniques used. Treatment continued for two years or more, and outcomes included measurement of IQ and level of functioning in the school system. However, there has been considerable and widespread criticism of Lovaas and other studies of this form of therapy based on analyses that determined the studies were flawed or weak based on a number of factors. These included: lack of clear standard diagnostic criteria at study entry, inadequate randomization which in some cases was based on the availability of therapists, and facilities, selection bias, small sample sizes, unrepresentative control groups, inadequate documentation of treatment intensity, different assessment tools used at baseline, limited outcome measures (e.g., IQ) with no documentation of the skills for normal functioning, social interactions, communication, etc. Also the Lovaas study compared different intensities of the same treatment rather than comparing different therapies. In addition, results from other investigators did not corroborate the extent of improvement noted by

Lovaas, and again, suffered from being methodologically weak, with criticisms that they were too small, too short in duration, with lack of standardized diagnostic instruments, and IQ measurements that were based mainly on non-verbal abilities. In July, 2000, The British Columbia Office of Health Technology Assessment performed a critical appraisal of Lovaas and similar publications, and concluded that there was insufficient scientifically valid evidence of effectiveness of the therapy to establish a relationship between the amount of any form of early comprehensive treatment program and overall outcome. Also that data was inadequate to establish the degree to which this form of treatment results in children achieving “normal” functioning however defined. In 2001, the American Academy of Pediatrics, in regard to intensive behavioral treatment, concluded that more replicative studies with improved methodology are needed before it can be recommended for all young children. In addition, the American Academy of Pediatrics, Committee on Children with Disabilities in a paper entitled “The Pediatrician's Role in the Diagnosis and Management of Autistic Spectrum Disorder in Children” published in *Pediatrics* 2001 stated that “There are no treatment guidelines for ASD (Autistic Spectrum Disorders) published. Although there is growing agreement among experts that early and sustained intensive behavioral and education intervention may improve overall outcomes, there is less agreement regarding the relative effectiveness of specific intervention strategies or the degree to which they should be delivered.”

Since many services to children with Autistic Disorder are provided by the child’s school system, providers are encouraged to coordinate care with them.

References

1. American Academy of Neurology, Subcommittee of the American Academy of Neurology and the Child Neurology Society. Practice parameter: Screening and Diagnosis of Autistic Disorder. *Neurology*. 2000; 55: 468- 479.
2. American Academy of Pediatrics, Committee on Children with Disabilities. Technical Report: The Pediatrician’s Role in the Diagnosis and Management of Autistic Spectrum Disorder in Children. *Pediatrics*. 2001; 107: 1- 18.
3. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th Edition Text Revision (DSM-IV-TR), 2000, American Psychiatric Press.
4. Wellpoint Medical Policy #BEH.00004: Treatment of Autism, Asperger’s Syndrome, Rett Syndrome, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder Not Otherwise Specified (NOS).
5. Wellpoint Clinical Guideline CG-BEH-01: Screening and Assessment Tools for Autism, Asperger's Syndrome, Rett Syndrome, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder Not Otherwise Specified (NOS).
6. Lovaas OI. Behavioral treatment and normal educational and intellectual functioning in young autistic children. *J Consulting Clin Psychol*. 1987; 55(1):3-9.
7. Center for Health Services and Policy Research, British Columbia Office of Health Technology Assessment, Autism and Lovaas treatment: A systematic review of effectiveness evidence, July 2000.

