IEHP UM Subcommittee Approved Authorization Guidelines

MRI Utilization in the Diagnosis of ADHD or Autism

Policy:
Based on the information reviewed, IEHP’s UM Subcommittee adopts a treatment guideline stance that reflects the below opinions, and thus, does not consider an MRI to be of use in the diagnosis of ADHD or Autism.

CPT Codes Not Covered:
- 70551,
- 70552,
- 70553

When paired with the following ICD-9 Codes:
- 314.0,
- 314.01,
- 299.0,
- 299.01

After October 01, 2015 ICD-10 Codes:
- F90.0
- F90.1
- F90.2
- F90.9
- F84.0

A recent review of literature performed by ECRI, which is a paid research organization, on December 28, 2011 supports the below statements. New citations are also given to show that no new evidence has been given in support of the use of an MRI for a diagnosis of ADHD and Autism.
Centers for Medicare & Medicaid Services (2011):
In 2011, Centers for Medicare and Medicaid Services (CMS) stated there were no national or local pending analyses, determinations, articles, or policies identified that specifically addressed the use of a magnetic resonance imaging for diagnosing autism spectrum disorders or attention deficit disorder with hyperactivity.

In 2006, the American Academy of Child and Adolescent Psychiatry stated MRI was not indicated for routine evaluations of patients with ADHD.

In 2010, the American Academy of Pediatrics reaffirmed that routine clinical neuroimaging for individuals with ASDs in not recommended.

National Institute for Health and Clinical Excellence (2011):
In September 2011, the National Institute for Health and Clinical Excellence (NICE) stated that neuroimaging should only be performed in children and young people with suspected or confirmed autism if there were specific clinical reasons to suspect a relevant coexisting or alternative condition, and only if neuroimaging can confirm a diagnoses or inform its management.

The Independent Physician Reviewer providing the review of this treatment guideline is Board Certified, American Board of Pediatrics; American Board of Psychiatry and Neurology. He is a Pediatric Neurology consultant at a large pediatric hospital, as well as co-director of a comprehensive epilepsy clinic. He also serves as a clinical Associate Professor in Neurology and Pediatrics in the University setting. He is a published author of many abstracts and other publications. He is a member of his local, state, and national associations, as well as Canadian associations. He has been in practice since 1992.

The reviewer indicated, “An MRI may be useful to rule out other brain disorders; however, it does not provide definitive information related to Autism or Attention Deficit Disorder or other behavior disorders. Although it is true that often abnormalities on brain MRI scan can be seen in patients with ADHD, Autism, Speech problems, and learning disabilities, especially if newer and specialized techniques (such as voxel-based morphometry, diffusion tensor imaging, and functional MRI) are used. These techniques represent exciting advances in elucidating the underlying pathology of these disorders and may ultimately have diagnostic value. However, a routine brain scan would be most useful to rule out a progressive disorder (such as mass lesion, neurodegenerative disorder) if the clinical information justified such concerns.”

The above review was considered, along with recent work by Drs. Xavier Castellanos, Judith Rapoport, National Institute of Mental Health, Child Psychiatry Branch, and colleagues, reflected in a report on their magnetic resonance imaging (MRI) study of 152 boys and girls with
ADHD in the October 9, 2002 Journal of the American Medical Association. The published opinion states, “MRI remains a research tool and cannot be used to diagnose ADHD in any given child, due to normal genetic variation in brain structure,” noted Rapoport. “The measured influence of ADHD on brain volume can only be discerned statistically across groups of children with and without the disorder.”

Effective Date: October 20, 2005
Reviewed Annually: November 9, 2016

Revised:
February 8, 2012
July 15, 2015

Bibliography:

**Disclaimer**
IEHP Clinical Authorization Guidelines (CAG) are developed to assist in administering plan benefits, they do not constitute a description of plan benefits. The Clinical Authorization Guidelines (CAG) express IEHP's determination of whether certain services or supplies are medically necessary, experimental and investigational, or cosmetic. IEHP has reached these conclusions based upon a review of currently available clinical information (including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). IEHP makes no representations and accepts no liability with respect to the content of any external information cited or relied upon in the Clinical Authorization Guidelines (CAG). IEHP expressly and solely reserves the right to revise the Clinical Authorization Guidelines (CAG), as clinical information changes.