Medical Policy
DNA-Based Testing for Adolescent Idiopathic Scoliosis

Table of Contents
• Policy: Commercial
• Policy: Medicare
• Authorization Information
• Coding Information
• Description
• Policy History
• Information Pertaining to All Policies
• References

Policy Number: 545
BCBSA Reference Number: 2.04.74
NCD/LCD: NA

Related Policies
• Interventions for Progressive Scoliosis, #550

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity
Medicare HMO BlueSM and Medicare PPO BlueSM Members

DNA-based prognostic testing for adolescent idiopathic scoliosis is INVESTIGATIONAL.

Prior Authorization Information
Pre-service approval is required for all inpatient services for all products. See below for situations where prior authorization may be required or may not be required for outpatient services.
Yes indicates that prior authorization is required.
No indicates that prior authorization is not required.
N/A indicates that this service is primarily performed in an inpatient setting.

<table>
<thead>
<tr>
<th>Outpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Managed Care (HMO and POS)</td>
</tr>
<tr>
<td>Commercial PPO and Indemnity</td>
</tr>
<tr>
<td>Medicare HMO BlueSM</td>
</tr>
<tr>
<td>Medicare PPO BlueSM</td>
</tr>
</tbody>
</table>

CPT Codes / HCPCS Codes / ICD Codes
Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.
CPT Codes

<table>
<thead>
<tr>
<th>CPT codes:</th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0004M</td>
<td>Scoliosis, DNA analysis of 53 single nucleotide polymorphisms (SNPs), using saliva, prognostic algorithm reported as a risk score.</td>
</tr>
</tbody>
</table>

Description

Adolescent idiopathic scoliosis (AIS) is the most common pediatric spinal deformity. This disease, of unknown etiology, occurs in otherwise healthy children with the onset of and highly correlated with, the adolescent growth spurt. The vertebrae become misaligned such that the spine deviates from the midline laterally and becomes rotated axially. Deviation can occur anteriorly (a lordotic deviation) or posteriorly (a kyphotic deviation). Screening remains somewhat controversial, with conflicting guidelines supporting this practice or alternatively suggesting insufficient evidence for this.

Once diagnosed, patients must be monitored over several years, usually with serial radiographs for curve progression. If the curve progresses, spinal bracing is the generally accepted first-line treatment. If the curve progresses in spite of bracing, spinal fusion may be recommended. Curve progression has been linked to a number of factors, including sex, curve magnitude, patient age, and skeletal maturity. About one quarter of patients report a positive family history of disease, and twin studies have consistently supported shared genetic factors.

An example of a DNA-based test to predict the risk of progression of scoliosis is the ScoliScore™ AIS (adolescent idiopathic scoliosis) prognostic DNA-based test from Axial Biotech. All DNA-based tests to predict the risk of progression of scoliosis are considered investigational regardless of the commercial name, the manufacturer, or FDA approval status.

Summary

The clinical utility of the ScoliScore™ test remains unknown. There is no direct evidence demonstrating that use of this test results in changes in management that improve outcomes. The value of early identification and intervention(s) for individuals at risk for progression of disease is unclear. As a result, DNA-based testing for AIS is considered investigational until results of further research on both clinical validity and utility have been reported.

Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2017</td>
<td>New references added from BCBSA National medical policy.</td>
</tr>
<tr>
<td>8/2015</td>
<td>New references added from BCBSA National medical policy.</td>
</tr>
<tr>
<td>9/2014</td>
<td>New references added from BCBSA National medical policy.</td>
</tr>
<tr>
<td>10/2013</td>
<td>New references from BCBSA National medical policy.</td>
</tr>
<tr>
<td>7/2013</td>
<td>Updated to add new CPT code 0004M.</td>
</tr>
<tr>
<td>4/2013</td>
<td>New references from BCBSA National medical policy.</td>
</tr>
<tr>
<td>1/1/2012</td>
<td>New policy, effective 1/1/2012, describing ongoing non-coverage.</td>
</tr>
</tbody>
</table>

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

- Medical Policy Terms of Use
- Managed Care Guidelines
- Indemnity/PPO Guidelines
- Clinical Exception Process
- Medical Technology Assessment Guidelines
References