Genetic Testing for Non-Medical Purposes

Description

While most traditional genetic tests are used for clear medical purposes, advances in gene discovery and genetic testing technology allow laboratories to offer genetic testing for other uses. Testing for paternity, ancestry, and non-disease traits such as baldness and eye color may be highly accurate and interesting. However, because these kinds of tests are not useful for medical management in the vast majority of cases, they are typically excluded from consideration.

Criteria

Criteria: General Coverage Guidance

Any genetic test that **DOES NOT** meet the following criteria is excluded from consideration:

- **Technical and clinical validity**: The test must be accurate, sensitive and specific, based on sufficient, quality scientific evidence to support the claims of the test.
- **Clinical utility**: Healthcare providers can use the test results to provide significantly better medical care for the individual.
- **Reasonable use**: The usefulness of the test is not significantly offset by negative factors, such as expense, clinical risk, or social or ethical challenges.

Criteria:

The following types of testing are not considered medically necessary and therefore, not eligible for reimbursement:

- Genome-wide association studies (GWAs): testing a large number of genetic variations spread across the whole genome for disease associations, generally done for information outside of a specific clinical need or context
  - Common trade names: 23andMe, Navigenics, Pathway Genomics, deCODEme
- Paternity testing: testing to establish biological relationships, often between a father and child(ren) but sometimes to determine other kinds of relationships (siblings, grandparents, etc.)
- Ancestry testing: testing that helps people discover more about the genetic make-up of their ancestors, generally used by genealogists and those interested in family history
• Non-disease trait testing: testing for physical traits (e.g., eye color, hair color, male pattern baldness, and cellulite) that do not have associated health problems, or can be deemed cosmetic in nature.

• Nutritional testing: for variations in metabolism pathways that may suggest vitamin or other nutritional supplements.
  o Common trade names: MyDNAVitamins, GeneWise

• Athletic ability: Testing to predict athletic performance types.
  o Common trade names: Sports Gene, Athleticode

• Genetic testing related to dating services
  o Common trade names: Scientific Match, GenePartner