

## Monogenic Diabetes (Including Maturity Onset Diabetes of the Young (MODY)) Panels

- I. Multigene panel analysis to establish or confirm a diagnosis of monogenic diabetes (including maturity-onset diabetes of the young (MODY)) is considered **medically necessary** when:
  - A. The member has a diagnosis of diabetes within the first 12 months of life, **OR**
  - B. The member has a diagnosis of diabetes before 30 years of age, **AND**
    1. The member has at least one of the following:
      - a) Autoantibody negative, **OR**
      - b) Retained C-peptide levels, **OR**
  - C. The member has a diagnosis of diabetes not characteristic of type 1 or type 2 diabetes, **AND**
    1. The member has a family history of diabetes consistent with an autosomal dominant pattern of inheritance.
- II. Multigene panel analysis to establish or confirm a diagnosis of monogenic diabetes (maturity-onset diabetes of the young (MODY)) is considered **investigational** for all other indications.

## DEFINITIONS

1. **Autosomal dominant pattern of inheritance** refers to a type of transmission of a genetic condition in which only one mutated copy of a gene (rather than two) is

necessary for an individual to manifest the disease. These conditions are generally characterized by the following traits:

- a. There are individuals with the condition in multiple generations of a family
- b. Individuals who do not have the condition do not have children with the condition
- c. Individuals with the condition have a parent with the condition

## REFERENCES

1. Murphy R, Colclough K, Pollin TI, et al. The use of precision diagnostics for monogenic diabetes: a systematic review and expert opinion. *Commun Med (Lond)*. 2023;3(1):136. Published 2023 Oct 5. doi:10.1038/s43856-023-00369-8
2. Greeley SAW, Polak M, Njølstad PR, et al. ISPAD Clinical Practice Consensus Guidelines 2022: The diagnosis and management of monogenic diabetes in children and adolescents. *Pediatr Diabetes*. 2022;23(8):1188-1211. doi:10.1111/pedi.13426
3. American Diabetes Association Professional Practice Committee. 2. Diagnosis and Classification of Diabetes: Standards of Care in Diabetes-2024. *Diabetes Care*. 2024;47(Suppl 1):S20-S42. doi:10.2337/dc24-S002