Coverage of any medical intervention discussed in a WellFirst Health medical policy is subject to the limitations and exclusions outlined in the member’s benefit certificate or policy and to applicable state and/or federal laws.

**Genetic Testing for Thrombophilia**

**MP9473**

**Covered Service:** Yes

**Prior Authorization Required:** No

**Additional Information:** Genetic testing is covered for a WellFirst Health member if the test results provide a direct medical benefit or guides reproductive decision-making for the WellFirst Health member. See [Genetic Testing MP9012](#) for additional information.

A first-degree relative is defined as an individual’s parents, full siblings, and children.

**WellFirst Health Medical Policy:**

1.0 Factor V Leiden (F5 gene 1691G>A mutation) testing is considered medically necessary for the evaluation of thromboembolism and conditions associated with thrombophilia, as indicated by **1 more** of the following:

1.1 Positive activated protein C resistance functional assay.

1.2 Preeclampsia or hemolysis, elevated liver enzymes, low platelets (HELLP) syndrome

1.3 Recurrent venous thromboembolism

1.4 Retinal vein occlusion in patients 50 years or younger without predisposing risk factors (e.g. hypertension) or with history of thromboembolic events

1.5 Venous thromboembolism associate with use of oral contraceptives, hormone replacement therapy, or selective estrogen receptor modular (e.g. tamoxifen, raloxifene) therapy

1.6 Venous thrombosis at unusual sites (e.g. cerebral, mesenteric, portal, or hepatic veins)

1.7 Woman with personal history of venous thromboembolism during pregnancy or post-partum.

1.8 F5 genetic testing is considered medically necessary in an individual who is not otherwise receiving anticoagulant prophylaxis for **EITHER** of the following indications:

1.8.1 Pregnant woman who has a personal history of venous thromboembolism associated with a non-recurrent (transient) risk factor (e.g., fracture, surgery, prolonged immobilization)
Coverage of any medical intervention discussed in a WellFirst Health medical policy is subject to the limitations and exclusions outlined in the member’s benefit certificate or policy and to applicable state and/or federal laws.

1.8.2 Individual who has a first-degree relative with F5 thrombophilia and **ONE** of the following:
   1.8.2.1 Surgery is planned; **OR**
   1.8.2.2 Patient is pregnant.

2.0 Prothrombin (F2 20210G>A mutation) gene testing is considered medically necessary for the evaluation of thromboembolism and conditions associated with thrombophilia, as indicated by **1 or more** of the following:
   2.1 Female with personal history of venous thromboembolism during pregnancy or post-partum
   2.2 Recurrent venous thromboembolism in individual younger than 20 years
   2.3 Stroke associated with patent foramen ovale
   2.4 Venous thromboembolism associated with use of oral contraceptives, hormone replacement therapy, or selective receptor modulator (e.g. tamoxifen, raloxifene) therapy
   2.5 Venous thrombosis at unusual sites (e.g. cerebral, mesenteric, portal, or hepatic veins).
   2.6 F2 genetic testing is considered medically necessary in an individual who is not otherwise receiving anticoagulant prophylaxis for **EITHER** of the following indications:
      2.6.1 Pregnant woman who has a personal history of venous thromboembolism associated with a non-recurrent (transient) risk factor (e.g., fracture, surgery, prolonged immobilization)
      2.6.2 Individual who has a first-degree relative with F5 or F2 thrombophilia and **ONE** of the following:

3.0 Factor V Leiden (F5 gene) genetic testing is considered experimental/investigational and therefore are not medically necessary for all other indications not listed in (1.0) because effectiveness has not been established.

4.0 Genetic testing for coagulation Factor V Leiden (F5 gene) or prothrombin F2 gene mutation is not covered for adverse pregnancy outcomes such as recurrent pregnancy loss (i.e., two or more consecutive pregnancy losses, preeclampsia, intrauterine growth restriction and placental abruption).

5.0 MTHFR genetic testing is considered experimental/investigational and therefore is not medically necessary.

6.0 Genetic testing for genes related to thrombophilias for all other indications not listed above is considered experimental/investigational and therefore is not medically necessary.
Coverage of any medical intervention discussed in a WellFirst Health medical policy is subject to the limitations and exclusions outlined in the member’s benefit certificate or policy and to applicable state and/or federal laws.

## CPT/HCPCS Codes Related to MP9473

* The list of codes (and their descriptors, if any) is provided for informational purposes only and may not be all inclusive or current. Listing of a code in this medical policy does not imply that the service described by the code is a covered or non-covered service. Benefit coverage for any service is determined by the member’s policy of health coverage with WellFirst Health. Inclusion of a code above does not imply any right to reimbursement or guarantee claim payment. Other medical policies may also apply. This list may not be all-inclusive.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>81240</td>
<td>F2 (prothrombin, coagulation factor II) (eg, hereditary hypercoagulability) gene analysis, 20210G&gt;A variant</td>
</tr>
<tr>
<td>81241</td>
<td>F5 (coagulation factor V) (eg, hereditary hypercoagulability) gene analysis, Leiden variant</td>
</tr>
<tr>
<td>81291</td>
<td>MTHFR (5,10-methylenetetrahydrofolate reductase) (eg, hereditary hypercoagulability) gene analysis, common variants (eg, 677T, 1298C)</td>
</tr>
<tr>
<td>81400</td>
<td>Molecular Pathology Procedure Level 1</td>
</tr>
</tbody>
</table>
Coverage of any medical intervention discussed in a WellFirst Health medical policy is subject to the limitations and exclusions outlined in the member’s benefit certificate or policy and to applicable state and/or federal laws.

<table>
<thead>
<tr>
<th>Committee/Source</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document created:</td>
<td>Medical Policy Committee/Health Services Division April 17, 2019</td>
</tr>
<tr>
<td>Revised:</td>
<td></td>
</tr>
<tr>
<td>Reviewed:</td>
<td></td>
</tr>
</tbody>
</table>

Effective: 01/01/2020