GUIDELINES
This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder contract. Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards. This guideline is solely for explaining correct procedure reporting and does not imply coverage and reimbursement.

DESCRIPTION
Drug resistance to human immunodeficiency virus (HIV) is a major factor in the failure of antiretroviral therapy. In order for practitioners to provide effective pharmaceutical care to their HIV patients, it is essential that they understand the mechanisms of HIV drug resistance as well as the various factors that can contribute to its emergence. In addition, numerous new agents and classes of antiretroviral drugs are currently under development in an effort to keep pace with emerging HIV drug resistance.

The Trofile automated diagnostic test is a patient-specific co-receptor tropism assay that determines which co-receptor a patient’s HIV strain or strains use for viral entry. This test is indicated for the detection of CCR5-Tropism and treatment with CCR5 antagonists, (e.g., Maraviroc [Selzentry]). The Trofile assay has a turnaround time of 14-18 days and Monogram Biosciences is currently the only laboratory that performs this CLIA-validated tropism test.

POLICY
HIV tropism testing (87900-87906) does not require prior authorization.

HMO, PPO, Individual Marketplace, Elite, Advantage
HIV tropism testing with a phenotypic co-receptor tropism assay is considered medically necessary in an HIV-1 infected individual for either of the following indications:

- Prior to initiating a combination antiretroviral drug regimen with a coreceptor antagonist (CCR5 inhibitor, that is, maraviroc); or
- In an individual who has experienced virologic failure while receiving therapy that contains a CCR5 inhibitor.

HIV tropism testing with a phenotypic co-receptor tropism assay is considered not medically necessary for all other indications, including, but not limited to the following:

- When using other coreceptor (genotypic) assay techniques; or
- Repeat HIV tropism testing during coreceptor antagonist treatment or after failure with a coreceptor antagonist; or
- To predict disease progression, irrespective of coreceptor antagonist treatment.

CODING/BILLING INFORMATION
The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.

CPT CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>87900</td>
<td>Infectious agent drug susceptibility phenotype prediction using regularly updated genotypic bioinformatics</td>
</tr>
<tr>
<td>87901</td>
<td>Infectious agent genotype analysis by nucleic acid (DNA or RNA); HIV-1, reverse transcriptase and protease regions</td>
</tr>
<tr>
<td>87903</td>
<td>Infectious agent phenotype analysis by nucleic acid (DNA or RNA) with drug resistance tissue culture analysis, HIV-1; first through 10 drugs tested</td>
</tr>
<tr>
<td>87904</td>
<td>Infectious agent phenotype analysis by nucleic acid (DNA or RNA) with drug resistance tissue culture analysis, HIV-1; each additional drug tested (list separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>87906</td>
<td>Infectious agent genotype analysis by nucleic acid (DNA or RNA); HIV-1, other region (eg, integrase, fusion)</td>
</tr>
</tbody>
</table>

TAWG REVIEW DATES: 09/23/16

REVISION HISTORY EXPLANATION
09/23/16: Policy created to reflect most current clinical evidence per TAWG.
12/12/17: Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee.
REFERENCES/RESOURCES
Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services
Ohio Department of Medicaid http://jfs.ohio.gov/
American Medical Association, Current Procedural Terminology (CPT®) and associated publications and services
Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets
Industry Standard Review
Hayes, Inc.