Effective for dates of service on or after July 1, 2010, benefit criteria for human immunodeficiency virus (HIV) drug resistance testing will change. Provider type and place of service changes will be applied to HIV drug resistance testing procedure codes 87900, 87901, 87903, and 87904.

Benefit changes will be applied to the following laboratory procedure codes:

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<tr>
<th>Procedure Codes</th>
<th>Benefit Changes - Total Component</th>
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| 87900, 87901, 87903, 87904 | Settings to be reimbursed: Services rendered in the outpatient setting will be reimbursed to hospitals.  
Services rendered in the independent laboratory setting will be reimbursed to independent laboratories.  
Settings no longer reimbursed: Services rendered in the office or inpatient setting will no longer be reimbursed to any provider type.  
Provider types no longer reimbursed: Services rendered in the outpatient setting will no longer be reimbursed to physicians, independent laboratories, radiation treatment centers, nephrologists, renal dialysis facilities, and hospital-based rural health clinics (RHC).  
Services rendered in the independent laboratory setting will no longer be reimbursed to physicians, radiation treatment centers, hospitals, nephrologists, renal dialysis facilities, and RHCs. |

There are two types of HIV drug resistance testing:

- **Genotypic test**: Identifies the presence of mutations that are known to cause reduced drug susceptibility.
- **Phenotypic test**: Measures drug susceptibility of the virus by determining the concentration of drug that inhibits viral replication in vitro.

Standard treatment regimens for HIV therapy require a combination of three or more drugs. Standard therapy continues if reduction in viral load is achieved. Incomplete virus suppression favors the development of drug resistance and jeopardizes the success of future therapy. Testing for drug resistance as a prerequisite to further therapy is indicated under such circumstances.

To ensure accurate testing results, the client should be on appropriate antiretroviral therapy at the time of testing or within four weeks of discontinuing a drug regimen.

Testing for antiretroviral drug resistance is recommended before the initiation of therapy in treatment-naïve children.

Testing for antiretroviral drug resistance is indicated in certain clinical situations. These indications include:

- Individuals who have achieved a suboptimal response after the initiation of antiretroviral therapy.
• For individuals with an initial (new onset) acute HIV infection, to determine whether a drug-resistant viral strain was transmitted and to plan drug regimen accordingly.

• In individuals with virologic failure during antiretroviral therapy, laboratory results that show HIV ribonucleic acid (RNA) levels greater than 500 and less than 1,000 copies per ml.

• HIV-infected pregnant women before the initiation of therapy.

• HIV-infected pregnant women entering pregnancy with HIV RNA levels of 400 copies per ml or lower while the women are on therapy.

**Documentation Requirements**

Documentation must be maintained in the client's medical record to support the medical necessity of the drug resistance testing. Specific documentation requirements are dependent on the rationale for the testing. Documentation must include, but is not limited to, all of the following:

- Date on which the drug regimen was initiated
- Dosage and frequency of the prescribed medication
- Laboratory tests that support all of the following:
  - Suboptimal response to the specific drug therapy
  - Acute HIV infection, with identification of the specific viral strain
  - HIV RNA levels greater than 500 and less than 1,000 copies per ml
  - Positive pregnancy results in an HIV-positive female client
  - HIV RNA levels of 400 copies per ml or less during pregnancy

Drug resistance testing is not recommended if either one of the following criteria is met:

- When the drug regimen has been discontinued for more than four weeks.
- When the viral load is less than 500 copies per ml.

**Authorization Requirements**

Authorization is not required for either genotypic or phenotypic testing.

**Reimbursement**

Reimbursement for procedure codes 87900, 87901, and 87903 is limited to one of each per day for the same procedure and same provider and two of each per client, per rolling year, and same provider.

If additional testing for drug resistance is performed within the same rolling year, the provider must submit documentation that supports the medical necessity of the additional testing.

Procedure code 87904 is denied if it is not billed with related procedure code 87903 on the same date of service by any provider.