Changes to Reporting of Patient Fasting Status with Glucose Results
ACL will implement changes to the reporting of patient fasting status with glucose results. Fasting status is currently reported as part of the lipid panel results (LIPPNL, LIPDPL). Effective Wednesday, September 18, 2013, fasting status will also be reported with glucose testing. To enable the reporting of fasting status, the order code for glucose was rebuilt as a panel. As a result, the orderable test code will change. Physicians are asked to update their preference list or favorites by replacing the current glucose order code with the new test order code listed in the box below.

<table>
<thead>
<tr>
<th>Test</th>
<th>Former Test Order Code</th>
<th>New Test Order Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose</td>
<td>GLU</td>
<td>GLUP</td>
</tr>
<tr>
<td>Glucose, Bedside (lab performed fingerstick)</td>
<td>GLUB</td>
<td>GLUBP</td>
</tr>
</tbody>
</table>

Note: The order code for Point of Care (POC) glucose testing (5GLU) is not changing.

Fasting status is also being added to the following test panels (which also contain glucose results): Basic Metabolic (Test Order Code BPNL), Comprehensive Metabolic (Test Order Code CPNL), and Renal (Test Order Code RENPNL). Please note: The test order code for these panels will not change.

Site practices may vary regarding the reporting of fasting status due to different patient populations and requirements of ordering physicians. Fasting status is more typically reported in ambulatory settings (clinic or outpatient).

New Tests for detection of the Epstein-Barr Virus by PCR
Test Order Codes EBVSRN or EBVCRR
The Epstein-Barr virus (EBV), also called human herpesvirus 4 (HHV-4) is one of the most common viruses in humans. There is strong evidence that the virus has a primary role in the pathogenesis of multiple autoimmune diseases, particularly dermatomyositis, systemic lupus erythematous, rheumatoid arthritis, Sjogren’s syndrome and multiple sclerosis. It is also known to cause several lymphoproliferative disorders and cancers, particularly Hodgkin’s disease, Burkitt’s lymphoma, nasopharyngeal carcinoma, and central nervous system lymphomas associated with HIV infants who become susceptible to EBV as soon as maternal antibody protection (present at birth) disappears. Monitoring Epstein-Barr virus DNA levels by quantitative PCR in patients at risk of EBV-associated lymphoproliferative disorders may allow timely recognition of virus reactivation and permit initiation of antiviral treatment.

This test is not for use in the diagnosis of infectious mononucleosis. To aid diagnosis of primary Epstein-Barr virus infectious mononucleosis after a suspected false-negative heterophile antibody (Monospot) test, order EVBV antibody panel.

EBVQN quantitative assay is designated for therapeutic monitoring
EBVQL qualitative assay is designated for the diagnosis of EBV disease
Serum Vitamin D, 1, 25-Dihydroxy Test Order Code: V125D
This assay is a radioimmunoassay intended for the quantitative determination of 1, 25-dihydroxy Vitamin D (1,25(OH)₂D) in serum.

- This test is primarily indicated during patient evaluation for hypercalcemia and renal failure. A normal result does not rule out Vitamin D deficiency.
- The recommended test for diagnosing Vitamin D deficiency is Vitamin D, 25-Hydroxy (ACL Test Order Code 25VDR).

<table>
<thead>
<tr>
<th>ACL Test Order Code</th>
<th>Test Name</th>
<th>Specimen Requirement</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>V125D</td>
<td>Vitamin D, 1, 25-Dihydroxy</td>
<td>Serum (plasma will no longer be accepted)</td>
<td>Available within 5 days</td>
</tr>
</tbody>
</table>

Carbon Monoxide Specimen Requirements Change
(Test Order Code GLCO)
It was recently identified that plastic evacuated tube collection devices, various anti-coagulants, and gel separators all contribute to falsely elevated carbon monoxide (CO) measurements. Therefore, effective Wednesday, September 18, 2013, the specimen requirements for CO testing will be limited only to those specimen types listed below.

Acceptable specimen requirements for carbon monoxide testing:

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Stability</th>
<th>Fill Volume</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heparin Syringe (blood gas syringe)</td>
<td>Test immediately</td>
<td>Per syringe manufacturer</td>
<td>This is the preferred sample type for hospital use</td>
</tr>
<tr>
<td>Sodium Heparin (GLASS) evacuated</td>
<td>Stable UNOPENED up to 48 hours</td>
<td>Must be at least one-half full</td>
<td>Ensure that this tube is not used for electrolyte testing (anticoagulant contains sodium). Take precautions when transporting the glass tube to the testing site.</td>
</tr>
</tbody>
</table>

Specimens that are clotted, collected in a plastic or gel evacuated tube, collected with an anti-coagulant other than sodium heparin, or are less than one-half full will be rejected.
Necessary Information for Advance Beneficiary Notice of Noncoverage (ABN)
The following ‘fields’ appear on the ACL ABN:

**Patient Name** – MUST enter first and last name

**Identification Number** – OPTIONAL, if used, must NOT be the Medicare HICN or SSN

**Laboratory Test** – MUST specify the services (tests) believed to be non-covered

**Reason** – MUST link the reason applicable to each test listed on the form

**Estimated Cost** – MUST provide a reasonable estimate (within $100 or 25% of actual costs) for all tests listed

**Options** – 1 of the 3 Option boxes must be chosen by the beneficiary (or beneficiary representative)

**Additional Information** – OPTIONAL

**Signature Box** – MUST be signed by the beneficiary (or beneficiary representative)

**Date** – MUST write the date the ABN is signed

Omission of any of the MUST fields does make the ABN invalid.

**Note:** If not using the ACL ABN, client must also include the ‘notifier’ name, address and telephone number in the header of the form, and Disclosure Statement in the footer of the form.
MTHFR genotyping assay for C677T and A1298C polymorphism

**Test Order Code TXMTHF**
Methylenetetrahydrofolate reductase (MTHFR) is an enzyme which catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a cosubstrate for homocysteine remethylation to methionine. MTHFR gene polymorphisms c.677C>T (C677T) and c.1298A>C (A1298C) are associated with reduced MTHFR enzyme activity predisposing affected individuals to elevated total homocysteine levels in serum or plasma. MTHFR genotypes of homozygotes for C677T or compound heterozygotes for C677T/A1298C have significantly elevated homocysteine plasma levels. These individuals may also show toxicity from medications (i.e. methotrexate) that affect folate metabolism. Elevated plasma homocysteine is an independent risk factor for arteriosclerotic coronary heart disease and thrombosis. The plasma concentration of homocysteine reflects genetic as well as environmental factors and is more directly associated with thrombotic risk.

New Test for MGMT Methylation

**Test Order Code MGMT**
ACL is offering a test for MGMT gene promoter methylation status which predicts drug effectiveness in Glioblastoma.

MGMT (O(6)-methylguanine-DNA methyltransferase) is a DNA repair enzyme involved in the repair of damage caused by a variety of DNA cross linking compounds, including alkylating agents. Loss of gene expression frequently occurs via hypermethylation of the CpG sites in the promoter region. Increased methylation of the MGMT gene promoter region causes diminished or silenced expression of the gene, making cells more sensitive to DNA damage. This relationship has been shown for glioblastomas and alkylating agents such as Carmustine (BCNU). Approximately 40% to 45% of glioblastoma multiforme (GBM) tumors exhibit MGMT gene methylation. MGMT promoter methylation correlates with prolonged progression-free survival in glioma patients treated with TEMODAR® (temozolomide). MGMT methylation has also been shown to be a predictor of radiographic tumor pseudo-progression after treatment.