1. POLICY DESCRIPTION:

Amylase is a digestive enzyme normally released from the acinar cells of the exocrine pancreas into the duodenum. Lipase is also a type of digestive enzyme made by your pancreas that catalyzes the breakdown of fats to fatty acids and glycerol or other alcohols. Following injury to or a medical disorder with the pancreas, both of these enzymes are released into circulation. While amylase can be cleared in the urine, both amylase and lipase are also reabsorbed back into circulation. Though it’s normal to have small amounts of amylase in your urine and both amylase and lipase in your blood, in cases of acute pancreatitis, serum activity for both enzymes is greatly increased.

Both amylase and lipase are measured through blood tests, with a urine amylase test sometimes used in conjunction with or following an amylase blood test. Though both amylase and lipase testing can be used to diagnose pancreatitis, serum lipase is the preferred test for the initial diagnosis of acute pancreatitis due to its improved sensitivity and wider diagnostic window, particularly in alcohol-induced pancreatitis. In acute pancreatitis, amylase can rise rapidly within 3–6 hours of the onset of symptoms and may remain elevated for up to five days. Lipase, however, usually peaks at 24 hours with serum concentrations remaining elevated for 8–14 days. This means a lipase test is far more useful than amylase when the clinical presentation or testing has been delayed for more than 24 hours. Once an initial diagnosis is made, repeated use of amylase testing to monitor disease prognosis is also discouraged and testing for both amylase and lipase is unnecessary, as it increases costs while only marginally improving diagnostic efficiency compared to either marker alone.

2. RESPONSIBLE PARTIES:

Medical Management Administration, Utilization Management, Integrated Care Management, Pharmacy, Claim Department, Providers Contracting.

3. DEFINITIONS:

Pancreatitis - an inflammation of pancreatic tissue and can be either acute or chronic. Damage to pancreatic tissue, including pancreatitis, can result in elevated pancreatic enzyme concentrations; whereas depressed enzyme levels are associated with exocrine pancreatic insufficiency.

Chronic pancreatitis (CP) - an inflammation of the pancreatic tissue. The two hallmarks of CP are severe abdominal pain and pancreatic insufficiency (Freedman, 2017). Alcohol-induced chronic pancreatitis (or alcohol pancreatitis) accounts for 60-70% of all cases of CP.
Acute pancreatitis - sudden inflammation of the pancreas that may be mild or life threatening but usually subsides. Gallstones and alcohol abuse are the main causes of acute pancreatitis. Severe abdominal pain is the predominant symptom.

Amylase - an enzyme produced predominantly in the salivary glands (s-isoform) and the pancreas (p-isoform or p-isoamylase) and is responsible for the digestion of polysaccharides.

Pancreatic Lipase – also known as triacylglycerol lipase (herein referred to as “lipase”) is an enzyme responsible for hydrolyzing triglycerides to aid in the digestion of fats. Similar to amylase, lipase concentration increases shortly after pancreatic injury (within 3-6 hours).

4. POLICY:

MetroPlus Health considers pancreatic amylase testing for the initial diagnosis of acute pancreatitis as not medically necessary for both initial diagnosis of acute pancreatitis and for repeated use to monitor disease prognosis. Lipase testing can be used to diagnose pancreatitis or another disease of the pancreas, find out if there is a blockage in a patient’s pancreas and/or check for chronic diseases that affect the pancreas, such as cystic fibrosis. Signs or symptoms of a pancreatic disorder include:

- severe upper abdominal pain that radiates to the back or feels worse after eating
- fever
- loss of appetite
- nausea
- vomiting
- yellowing of the eyes or skin (jaundice)
- rapid pulse
- loose, fatty, foul-smelling stools (steatorrhea).

Documentation Requirements:
The patient's medical record must contain documentation that fully supports the medical necessity for services included within this Medical Policy. (See "Limitations/Exclusions.")

This documentation includes, but is not limited to, relevant medical history, physical examination, and results of pertinent diagnostic tests or procedures.

5. LIMITATIONS/ EXCLUSIONS:

Total and pancreatic amylase testing for the initial diagnosis of acute pancreatitis is not permissible for both initial diagnosis of acute pancreatitis and for repeated use to monitor
disease prognosis. Instead, use lipase testing. Only if an individual has signs and symptoms of persisting pancreatic or peripancreatic inflammation, blockage of the pancreatic duct or development of a pseudocyst should lipase testing be reconsidered.

The correct use of an ICD-10-CM code listed below does not assure coverage of a service. The service must be reasonable and necessary in the specific case and must meet the criteria specified in this determination.

CPT code 82150 is non covered for any diagnosis with point of service (POS) 11, 12, 20, 22 and 81.

6. **APPLICABLE PROCEDURE CODES:**

   Applicable procedure code covered only with the applicable diagnosis code below.

<table>
<thead>
<tr>
<th>CPT</th>
<th>Description</th>
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<tbody>
<tr>
<td>83690</td>
<td>Lipase</td>
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7. **APPLICABLE DIAGNOSIS CODES:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>K85.9</td>
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</tr>
<tr>
<td>K83.1</td>
<td>Blockage of pancreatic duct&lt;br&gt;Oclusion of bile duct without cholelithiasis&lt;br&gt;Stenois of bile duct without cholelithiasis&lt;br&gt;Stricture of bile duct without cholelithiasis</td>
</tr>
<tr>
<td>K86.1</td>
<td>Chronic pancreatitis NOS&lt;br&gt;Infectious chronic pancreatitis&lt;br&gt;Recurrent chronic pancreatitis&lt;br&gt;Relapsing chronic pancreatitis</td>
</tr>
<tr>
<td>K86.3</td>
<td>Pseudocyst</td>
</tr>
</tbody>
</table>

8. **REFERENCES:**


Gastroenterological Association Institute Guideline on Initial Management of Acute Pancreatitis Crockett, Seth D. Crockett, Seth et al. Gastroenterology, Volume 154, Issue 4, 1096 - 1101

https://medlineplus.gov/lab-tests/amylase-test/

https://www.icd10data.com/ICD10CM/Codes/R00-R99/R70-R79/R74/-/R74.8


https://medlineplus.gov/lab-tests/lipase-tests/

REVISION LOG:

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Approved: Date: 6/8/2020

Bruce Sosler, MD
Clinical Medical Director

Sanjiv Shah, MD
Chief Medical Officer

Medical Guideline Disclaimer:
Property of Metro Plus Health Plan. All rights reserved. The treating physician or primary care provider must submit MetroPlus Health Plan clinical evidence that the patient meets the criteria for
Policy and Procedure

| Title: Amylase Testing | Division: Medical Management
| Approval Date: 6/8/2020 | Department: Utilization Management
| Review Date: 6/8/2021 | Policy Number: UM-MP255
| Retired Date: | Cross Reference Number:

the treatment or surgical procedure. Without this documentation and information, MetroPlus Health Plan will not be able to properly review the request for prior authorization. The clinical review criteria expressed in this policy reflects how MetroPlus Health Plan determines whether certain services or supplies are medically necessary. MetroPlus Health Plan established the clinical review criteria based upon a review of currently available clinical information (including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). MetroPlus Health Plan expressly reserves the right to revise these conclusions as clinical information changes, and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by MetroPlus Health Plan, as some programs exclude coverage for services or supplies that MetroPlus Health Plan considers medically necessary. If there is a discrepancy between this guidelines and a member's benefits program, the benefits program will govern. In addition, coverage may be mandated by applicable legal requirements of a state, the Federal Government or the Centers for Medicare & Medicaid Services (CMS) for Medicare and Medicaid members.
All coding and website links are accurate at time of publication.
MetroPlus Health Plan has adopted the herein policy in providing management, administrative and other services to our members, related to health benefit plans offered by our organization.