#### 5.00 Digestive System

**A.** What kinds of disorders do we consider in the digestive system?

Disorders of the digestive system include gastrointestinal hemorrhage, hepatic (liver) dysfunction, inflammatory bowel disease, short bowel syndrome, and malnutrition. They may also lead to complications, such as obstruction, or be accompanied by manifestations in other body systems.

- **B.** What documentation do we need? We need a record of your medical evidence, including clinical and laboratory findings. The documentation should include appropriate medically acceptable imaging studies and reports of endoscopy, operations, and pathology, as appropriate to each listing, to document the severity and duration of your digestive disorder. Medically acceptable imaging includes, but is not limited to, x-ray imaging, sonography, computerized axial tomography (CAT scan), magnetic resonance imaging (MRI), and radionuclide scans. Appropriate means that the technique used is the proper one to support the evaluation and diagnosis of the disorder. The findings required by these listings must occur within the period we are considering in connection with your application or continuing disability review.
- **C.** How do we consider the effects of treatment?
- 1. Digestive disorders frequently respond to medical or surgical treatment; therefore, we generally consider the severity and duration of these disorders within the context of prescribed treatment.
- **2.** We assess the effects of treatment, including medication, therapy, surgery, or any other form of treatment you receive, by determining if there are improvements in the symptoms, signs, and laboratory findings of your digestive disorder. We also assess any side effects of your treatment that may further limit your functioning.
- **3.** To assess the effects of your treatment, we may need information about:
- a. The treatment you have been prescribed (for example, the type of medication or therapy, or your use of parenteral (intravenous) nutrition or supplemental enteral nutrition via a gastrostomy);
- b. The dosage, method, and frequency of administration;
- c. Your response to the treatment;
- d. Any adverse effects of such treatment; and
- e. The expected duration of the treatment.
- **4.** Because the effects of treatment may be temporary or long-term, in most cases we need information about the impact of your treatment, including its expected

duration and side effects, over a sufficient period of time to help us assess its outcome. When adverse effects of treatment contribute to the severity of your impairment(s), we will consider the duration or expected duration of the treatment when we assess the duration of your impairment(s).

- **5.** If you need parenteral (intravenous) nutrition or supplemental enteral nutrition via a gastrostomy to avoid debilitating complications of a digestive disorder, this treatment will not, in itself, indicate that you are unable to do any gainful activity, except under 5.07, short bowel syndrome (see 5.00F).
- **6.** If you have not received ongoing treatment or have not had an ongoing relationship with the medical community despite the existence of a severe impairment(s), we will evaluate the severity and duration of your digestive impairment on the basis of the current medical and other evidence in your case record. If you have not received treatment, you may not be able to show an impairment that meets the criteria of one of the digestive system listings, but your digestive impairment may medically equal a listing or be disabling based on consideration of your residual functional capacity, age, education, and work experience.
- **D.** How do we evaluate chronic liver disease?
- 1. General. Chronic liver disease is characterized by liver cell necrosis, inflammation, or scarring (fibrosis or cirrhosis), due to any cause, that persists for more than 6 months. Chronic liver disease may result in portal hypertension, cholestasis (suppression of bile flow), extrahepatic manifestations, or liver cancer. (We evaluate liver cancer under 13.19.) Significant loss of liver function may be manifested by hemorrhage from varices or portal hypertensive gastropathy, ascites (accumulation of fluid in the abdominal cavity), hydrothorax (ascitic fluid in the chest cavity), or encephalopathy. There can also be progressive deterioration of laboratory findings that are indicative of liver dysfunction. Liver transplantation is the only definitive cure for end stage liver disease (ESLD).
- **2.** *Examples of chronic liver disease* include, but are not limited to, chronic hepatitis, alcoholic liver disease, non-alcoholic steatohepatitis (NASH), primary biliary cirrhosis (PBC), primary sclerosing cholangitis (PSC), autoimmune hepatitis, hemochromatosis, drug-induced liver disease, Wilson's disease, and serum alpha-1 antitrypsin deficiency. Acute hepatic injury is frequently reversible, as in viral, drug-induced, toxin-induced, alcoholic, and ischemic hepatitis. In the absence of evidence of a chronic impairment, episodes of acute liver disease do not meet 5.05.
- **3.** *Manifestations of chronic liver disease.*
- a. Symptoms may include, but are not limited to, pruritis (itching), fatigue, nausea, loss of appetite, or sleep disturbances. Symptoms of chronic liver disease may have a poor correlation with the severity of liver disease and functional ability.
- b. Signs may include, but are not limited to, jaundice, enlargement of the liver and

spleen, ascites, peripheral edema, and altered mental status.

c. Laboratory findings may include, but are not limited to, increased liver enzymes, increased serum total bilirubin, increased ammonia levels, decreased serum albumin, and abnormal coagulation studies, such as increased International Normalized Ratio (INR) or decreased platelet counts. Abnormally low serum albumin or elevated INR levels indicate loss of synthetic liver function, with increased likelihood of cirrhosis and associated complications. However, other abnormal lab tests, such as liver enzymes, serum total bilirubin, or ammonia levels, may have a poor correlation with the severity of liver disease and functional ability. A liver biopsy may demonstrate the degree of liver cell necrosis, inflammation, fibrosis, and cirrhosis. If you have had a liver biopsy, we will make every reasonable effort to obtain the results; however, we will not purchase a liver biopsy. Imaging studies (CAT scan, ultrasound, MRI) may show the size and consistency (fatty liver, scarring) of the liver and document ascites (see 5.00D6).

#### **4.** Chronic viral hepatitis infections.

#### a. General.

- (i) Chronic viral hepatitis infections are commonly caused by hepatitis C virus (HCV), and to a lesser extent, hepatitis B virus (HBV). Usually, these are slowly progressive disorders that persist over many years during which the symptoms and signs are typically nonspecific, intermittent, and mild (for example, fatigue, difficulty with concentration, or right upper quadrant pain). Laboratory findings (liver enzymes, imaging studies, liver biopsy pathology) and complications are generally similar in HCV and HBV. The spectrum of these chronic viral hepatitis infections ranges widely and includes an asymptomatic state; insidious disease with mild to moderate symptoms associated with fluctuating liver tests; extrahepatic manifestations; cirrhosis, both compensated and decompensated; ESLD with the need for liver transplantation; and liver cancer. Treatment for chronic viral hepatitis infections varies considerably based on medication tolerance, treatment response, adverse effects of treatment, and duration of the treatment. Comorbid disorders, such as HIV infection, may affect the clinical course of viral hepatitis infection(s) or may alter the response to medical treatment.
- (ii) We evaluate all types of chronic viral hepatitis infections under 5.05 or any listing in an affected body system(s). If your impairment(s) does not meet or medically equal a listing, we will consider the effects of your hepatitis when we assess your residual functional capacity.
- b. *Chronic hepatitis B virus (HBV) infection.*
- (i) Chronic HBV infection is diagnosed by the detection of hepatitis B surface antigen (HBsAg) in the blood for at least 6 months. In addition, detection of the hepatitis B envelope antigen (HBeAg) suggests an increased likelihood of progression to cirrhosis and ESLD.
- (ii) The therapeutic goal of treatment is to suppress HBV replication and thereby

prevent progression to cirrhosis and ESLD. Treatment usually includes a combination of interferon injections and oral antiviral agents. Common adverse effects of treatment are the same as noted in 5.00D4c(ii) for HCV, and generally end within a few days after treatment is discontinued.

- c. Chronic hepatitis C virus (HCV) infection.
- (i) Chronic HCV infection is diagnosed by the detection of hepatitis C viral RNA in the blood for at least 6 months. Documentation of the therapeutic response to treatment is also monitored by the quantitative assay of serum HCV RNA ("HCV viral load"). Treatment usually includes a combination of interferon injections and oral ribavirin; whether a therapeutic response has occurred is usually assessed after 12 weeks of treatment by checking the HCV viral load. If there has been a substantial reduction in HCV viral load (also known as early viral response, or EVR), this reduction is predictive of a sustained viral response with completion of treatment. Combined therapy is commonly discontinued after 12 weeks when there is no early viral response, since in that circumstance there is little chance of obtaining a sustained viral response (SVR). Otherwise, treatment is usually continued for a total of 48 weeks.
- (ii) Combined interferon and ribavirin treatment may have significant adverse effects that may require dosing reduction, planned interruption of treatment, or discontinuation of treatment. Adverse effects may include: Anemia (ribavirininduced hemolysis), neutropenia, thrombocytopenia, fever, cough, fatigue, myalgia, arthralgia, nausea, loss of appetite, pruritis, and insomnia. Behavioral side effects may also occur. Influenza-like symptoms are generally worse in the first 4 to 6 hours after each interferon injection and during the first weeks of treatment. Adverse effects generally end within a few days after treatment is discontinued.
- d. *Extrahepatic manifestations of HBV and HCV*. In addition to their hepatic manifestations, both HBV and HCV may have significant extrahepatic manifestations in a variety of body systems. These include, but are not limited to: Keratoconjunctivitis (sicca syndrome), glomerulonephritis, skin disorders (for example, lichen planus, porphyria cutanea tarda), neuropathy, and immune dysfunction (for example, cryoglobulinemia, Sjögren's syndrome, and vasculitis). The extrahepatic manifestations of HBV and HCV may not correlate with the severity of your hepatic impairment. If your impairment(s) does not meet or medically equal a listing in an affected body system(s), we will consider the effects of your extrahepatic manifestations when we assess your residual functional capacity.
- **5.** Gastrointestinal hemorrhage (5.02 and 5.05A). Gastrointestinal hemorrhaging can result in hematemesis (vomiting of blood), melena (tarry stools), or hematochezia (bloody stools). Under 5.02, the required transfusions of at least 2 units of blood must be at least 30 days apart and occur at least three times during a consecutive 6-month period. Under 5.05A, hemodynamic instability is diagnosed with signs such as pallor (pale skin), diaphoresis (profuse perspiration), rapid pulse, low blood pressure, postural hypotension (pronounced fall in blood pressure when arising to an upright position from lying down) or syncope (fainting). Hemorrhaging that results in hemodynamic instability is potentially life-threatening and therefore requires hospitalization for transfusion and supportive care. Under 5.05A, we require only one hospitalization for transfusion of at least 2 units of blood.

- **6.** Ascites or hydrothorax (5.05B) indicates significant loss of liver function due to chronic liver disease. We evaluate ascites or hydrothorax that is not attributable to other causes under 5.05B. The required findings must be present on at least two evaluations at least 60 days apart within a consecutive 6-month period and despite continuing treatment as prescribed.
- **7.** Spontaneous bacterial peritonitis (5.05C) is an infectious complication of chronic liver disease. It is diagnosed by ascitic peritoneal fluid that is documented to contain an absolute neutrophil count of at least 250 cells/mm3. The required finding in 5.05C is satisfied with one evaluation documenting peritoneal fluid infection. We do not evaluate other causes of peritonitis that are unrelated to chronic liver disease, such as tuberculosis, malignancy, and perforated bowel, under this listing. We evaluate these other causes of peritonitis under the appropriate body system listings.
- **8.** Hepatorenal syndrome (5.05D) is defined as functional renal failure associated with chronic liver disease in the absence of underlying kidney pathology. Hepatorenal syndrome is documented by elevation of serum creatinine, marked sodium retention, and oliguria (reduced urine output). The requirements of 5.05D are satisfied with documentation of any one of the three laboratory findings on one evaluation. We do not evaluate known causes of renal dysfunction, such as glomerulonephritis, tubular necrosis, drug-induced renal disease, and renal infections, under this listing. We evaluate these other renal impairments under 6.00ff.
- **9.** *Hepatopulmonary syndrome* (5.05E) is defined as arterial deoxygenation (hypoxemia) that is associated with chronic liver disease due to intrapulmonary arteriovenous shunting and vasodilatation in the absence of other causes of arterial deoxygenation. Clinical manifestations usually include dyspnea, orthodeoxia (increasing hypoxemia with erect position), platypnea (improvement of dyspnea with flat position), cyanosis, and clubbing. The requirements of 5.05E are satisfied with documentation of any one of the findings on one evaluation. In 5.05E1, we require documentation of the altitude of the testing facility because altitude affects the measurement of arterial oxygenation. We will not purchase the specialized studies described in 5.05E2; however, if you have had these studies at a time relevant to your claim, we will make every reasonable effort to obtain the reports for the purpose of establishing whether your impairment meets 5.05E2.

#### **10.** Hepatic encephalopathy (5.05F).

a. *General*. Hepatic encephalopathy usually indicates severe loss of hepatocellular function. We define hepatic encephalopathy under 5.05F as a recurrent or chronic neuropsychiatric disorder, characterized by abnormal behavior, cognitive dysfunction, altered state of consciousness, and ultimately coma and death. The diagnosis is established by changes in mental status associated with fleeting neurological signs, including "flapping tremor" (asterixis), characteristic electroencephalographic (EEG) abnormalities, or abnormal laboratory values that indicate loss of synthetic liver function. We will not purchase the EEG testing described in 5.05F3b; however, if you have had this test at a time relevant to your claim, we will make every reasonable effort to obtain the report for the purpose of establishing whether your impairment meets 5.05F.

- b. *Acute encephalopathy*. We will not evaluate your acute encephalopathy under 5.05F if it results from conditions other than chronic liver disease, such as vascular events and neoplastic diseases. We will evaluate these other causes of acute encephalopathy under the appropriate body system listings.
- **11.** *End stage liver disease* (ESLD) documented by scores from the SSA Chronic Liver Disease (SSA CLD) calculation (5.05G).
- a. We will use the SSA CLD score to evaluate your ESLD under 5.05G. We explain how we calculate the SSA CLD score in b. through g. of this section.
- b. To calculate the SSA CLD score, we use a formula that includes three laboratory values: Serum total bilirubin (mg/dL), serum creatinine (mg/dL), and International Normalized Ratio (INR). The formula for the SSA CLD score calculation is:

```
9.57 x [Loge(serum creatinine mg/dL)]
+3.78 x [Loge(serum total bilirubin mg/dL)]
+11.2 x [Loge(INR)]
+6.43
```

c. When we indicate "Loge" in the formula for the SSA CLD score calculation, we mean the "base e logarithm" or "natural logarithm" (ln) of a numerical laboratory value, not the "base 10 logarithm" or "common logarithm" (log) of the laboratory value, and not the actual laboratory value. For example, if an individual has laboratory values of serum creatinine 1.2 mg/dL, serum total bilirubin 2.2 mg/dL, and INR 1.0, we would compute the SSA CLD score as follows:

```
9.57 x [Loge(serum creatinine 1.2 mg/dL) = 0.182]
+3.78 x [Loge(serum total bilirubin 2.2 mg/dL) = 0.788]
+11.2 x [Loge(INR 1.0) = 0]
+6.43
\overline{1.74 + 2.98 + 0 + 6.43}= 1.74 + 2.98 + 0 + 6.43= 11.15, which is then rounded to an SSA CLD score of 11.
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- d. For any SSA CLD score calculation, all of the required laboratory values must have been obtained within 30 days of each other. If there are multiple laboratory values within the 30-day interval for any given laboratory test (serum total bilirubin, serum creatinine, or INR), we will use the highest value for the SSA CLD score calculation. We will round all laboratory values less than 1.0 up to 1.0.
- e. Listing 5.05G requires two SSA CLD scores. The laboratory values for the second SSA CLD score calculation must have been obtained at least 60 days after the latest laboratory value for

the first SSA CLD score and within the required 6month period. We will consider the date of each SSA CLD score to be the date of the first laboratory value used for its calculation.

- f. If you are in renal failure or on dialysis within a week of any serum creatinine test in the period used for the SSA CLD calculation, we will use a serum creatinine of 4, which is the maximum serum creatinine level allowed in the calculation, to calculate your SSA CLD score.
- g. If you have the two SSA CLD scores required by 5.05G, we will find that your impairment meets the criteria of the listing from at least the date of the first SSA CLD score.
- **12.** *Liver transplantation* (5.09) may be performed for metabolic liver disease, progressive liver failure, life-threatening complications of liver disease, hepatic malignancy, and acute fulminant hepatitis (viral, drug-induced, or toxin-induced). We will consider you to be disabled for 1 year from the date of the transplantation. Thereafter, we will evaluate your residual impairment(s) by considering the adequacy of post-transplant liver function, the requirement for post-transplant antiviral therapy, the frequency and severity of rejection episodes, comorbid complications, and all adverse treatment effects.

#### E. How do we evaluate inflammatory bowel disease (IBD)?

- 1. Inflammatory bowel disease (5.06) includes, but is not limited to, Crohn's disease and ulcerative colitis. These disorders, while distinct entities, share many clinical, laboratory, and imaging findings, as well as similar treatment regimens. Remissions and exacerbations of variable duration are the hallmark of IBD. Crohn's disease may involve the entire alimentary tract from the mouth to the anus in a segmental, asymmetric fashion. Obstruction, stenosis, fistulization, perineal involvement, and extraintestinal manifestations are common. Crohn's disease is rarely curable and recurrence may be a lifelong problem, even after surgical resection. In contrast, ulcerative colitis only affects the colon. The inflammatory process may be limited to the rectum, extend proximally to include any contiguous segment, or involve the entire colon. Ulcerative colitis may be cured by total colectomy.
- **2.** Symptoms and signs of IBD include diarrhea, fecal incontinence, rectal bleeding, abdominal pain, fatigue, fever, nausea, vomiting, arthralgia, abdominal tenderness, palpable abdominal mass (usually inflamed loops of bowel) and perineal disease. You may also have signs or laboratory findings indicating malnutrition, such as weight loss, edema, anemia, hypoalbuminemia, hypokalemia, hypocalcemia, or hypomagnesemia.
- **3.** IBD may be associated with significant extraintestinal manifestations in a variety of body systems. These include, but are not limited to, involvement of the eye (for example, uveitis, episcleritis, iritis); hepatobiliary disease (for example, gallstones, primary sclerosing cholangitis); urologic disease (for example, kidney stones, obstructive hydronephrosis); skin involvement (for example, erythema nodosum, pyoderma gangrenosum); or non-destructive inflammatory arthritis. You may also have associated thromboembolic disorders or vascular disease. These manifestations may not correlate with the severity of your IBD. If your impairment does not meet any of the criteria of 5.06, we will consider the effects of your extraintestinal manifestations in determining whether you have an impairment(s) that meets or

medically equals another listing, and we will also consider the effects of your extraintestinal manifestations when we assess your residual functional capacity.

**4.** Surgical diversion of the intestinal tract, including ileostomy and colostomy, does not preclude any gainful activity if you are able to maintain adequate nutrition and function of the stoma. However, if you are not able to maintain adequate nutrition, we will evaluate your impairment under 5.08.

#### F. How do we evaluate short bowel syndrome (SBS)?

- **1.** Short bowel syndrome (5.07) is a disorder that occurs when ischemic vascular insults (for example, volvulus), trauma, or IBD complications require surgical resection of more than one-half of the small intestine, resulting in the loss of intestinal absorptive surface and a state of chronic malnutrition. The management of SBS requires long-term parenteral nutrition via an indwelling central venous catheter (central line); the process is often referred to as hyperalimentation or total parenteral nutrition (TPN). Individuals with SBS can also feed orally, with variable amounts of nutrients being absorbed through their remaining intestine. Over time, some of these individuals can develop additional intestinal absorptive surface, and may ultimately be able to be weaned off their parenteral nutrition.
- **2.** Your impairment will continue to meet 5.07 as long as you remain dependent on daily parenteral nutrition via a central venous catheter for most of your nutritional requirements. Long-term complications of SBS and parenteral nutrition include central line infections (with or without septicemia), thrombosis, hepatotoxicity, gallstones, and loss of venous access sites. Intestinal transplantation is the only definitive treatment for individuals with SBS who remain chronically dependent on parenteral nutrition.
- **3.** To document SBS, we need a copy of the operative report of intestinal resection, the summary of the hospitalization(s) including: Details of the surgical findings, medically appropriate postoperative imaging studies that reflect the amount of your residual small intestine, or if we cannot get one of these reports, other medical reports that include details of the surgical findings. We also need medical documentation that you are dependent on daily parenteral nutrition to provide most of your nutritional requirements.

#### G. How do we evaluate weight loss due to any digestive disorder?

- 1. In addition to the impairments specifically mentioned in these listings, other digestive disorders, such as esophageal stricture, pancreatic insufficiency, and malabsorption, may result in significant weight loss. We evaluate weight loss due to any digestive disorder under 5.08 by using the Body Mass Index (BMI). We also provide a criterion in 5.06B for lesser weight loss resulting from IBD.
- 2. BMI is the ratio of your weight to the square of your height. Calculation and interpretation of the BMI are independent of gender in adults.

a. We calculate BMI using inches and pounds, meters and kilograms, or centimeters and kilograms. We must have measurements of your weight and height without shoes for these calculations.

b. We calculate BMI using one of the following formulas:

**English Formula** 

BMI = (Weight in Pounds  $\div$ [(Height in Inches) x (Height in Inches)]) x 703

Metric Formula

BMI = Weight in Kilograms  $\div$ [(Height in Meters) x (Height in Meters)]

or

BMI = (Weight in Kilograms ÷[(Height in Centimeters) x (Height in Centimeters)]) x 10,000

#### H. What do we mean by the phrase "consider under a disability for 1 year"?

We use the phrase "consider under a disability for 1 year" following a specific event in 5.02, 5.05A, and 5.09 to explain how long your impairment can meet the requirements of those particular listings. This phrase does not refer to the date on which your disability began, only to the date on which we must reevaluate whether your impairment continues to meet a listing or is otherwise disabling. For example, if you have received a liver transplant, you may have become disabled before the transplant because of chronic liver disease. Therefore, we do not restrict our determination of the onset of disability to the date of the specified event. We will establish an onset date earlier than the date of the specified event if the evidence in your case record supports such a finding.

# I. How do we evaluate impairments that do not meet one of the digestive disorder listings?

- 1. These listings are only examples of common digestive disorders that we consider severe enough to prevent you from doing any gainful activity. If your impairment(s) does not meet the criteria of any of these listings, we must also consider whether you have an impairment(s) that satisfies the criteria of a listing in another body system. For example, if you have hepatitis B or C and you are depressed, we will evaluate your impairment under 12.04.
- 2. If you have a severe medically determinable impairment(s) that does not meet a listing, we will determine whether your impairment(s) medically equals a listing. (See §§404.1526 and 416.926.) If your impairment(s) does not meet or medically equal a listing, you may or may not have the residual functional capacity to engage in substantial gainful activity. In this situation, we will proceed to the fourth, and if necessary, the fifth steps of the sequential evaluation process in §§404.1520 and 416.920. When we decide whether you continue to be disabled, we use the rules in §§404.1594, 416.994, and 416.994a as appropriate.

#### 5.01 Category of Impairments, Digestive System

**5.02** Gastrointestinal hemorrhaging from any cause, requiring blood transfusion (with or without hospitalization) of at least 2 units of blood per transfusion, and occurring at least three times during a consecutive 6-month period. The transfusions must be at least 30 days apart within the 6-month period. Consider under a disability for 1 year following the last documented transfusion; thereafter, evaluate the residual impairment(s).

#### **5.05** *Chronic liver disease*, with:

**A.** Hemorrhaging from esophageal, gastric, or ectopic varices or from portal hypertensive gastropathy, demonstrated by endoscopy, x-ray, or other appropriate medically acceptable imaging, resulting in hemodynamic instability as defined in 5.00D5, and requiring hospitalization for transfusion of at least 2 units of blood. Consider under a disability for 1 year following the last documented transfusion; thereafter, evaluate the residual impairment(s).

OR

- **B.** Ascites or hydrothorax not attributable to other causes, despite continuing treatment as prescribed, present on at least two evaluations at least 60 days apart within a consecutive 6-month period. Each evaluation must be documented by:
- 1. Paracentesis or thoracentesis; or
- 2. Appropriate medically acceptable imaging or physical examination and one of the following:
- a. Serum albumin of 3.0 g/dL or less; or
- b. International Normalized Ratio (INR) of at least 1.5.

OR

**C.** Spontaneous bacterial peritonitis with peritoneal fluid containing an absolute neutrophil count of at least 250 cells/mm3.

OR

**D.** Hepatorenal syndrome as described in 5.00D8, with one of the following:

- 1. Serum creatinine elevation of at least 2 mg/dL; or
- 2. Oliguria with 24-hour urine output less than 500 mL; or
- 3. Sodium retention with urine sodium less than 10 mEq per liter.

OR

- **E.** Hepatopulmonary syndrome as described in 5.00D9, with:
- 1. Arterial oxygenation (PaO2) on room air of:
- a. 60 mm Hg or less, at test sites less than 3000 feet above sea level, or
- b. 55 mm Hg or less, at test sites from 3000 to 6000 feet, or
- c. 50 mm Hg or less, at test sites above 6000 feet; or
- 2. Documentation of intrapulmonary arteriovenous shunting by contrast-enhanced echocardiography or macroaggregated albumin lung perfusion scan.

OR

- **F.** Hepatic encephalopathy as described in 5.00D10, with 1 and either 2 or 3:
- 1. Documentation of abnormal behavior, cognitive dysfunction, changes in mental status, or altered state of consciousness (for example, confusion, delirium, stupor, or coma), present on at least two evaluations at least 60 days apart within a consecutive 6-month period; and
- 2. History of transjugular intrahepatic portosystemic shunt (TIPS) or any surgical portosystemic shunt; or
- 3. One of the following occurring on at least two evaluations at least 60 days apart within the same consecutive 6-month period as in F1:
- a. Asterixis or other fluctuating physical neurological abnormalities; or
- b. Electroencephalogram (EEG) demonstrating triphasic slow wave activity; or
- c. Serum albumin of 3.0 g/dL or less; or
- d. International Normalized Ratio (INR) of 1.5 or greater.

OR

- **G.** End stage liver disease with SSA CLD scores of 22 or greater calculated as described in 5.00D11. Consider under a disability from at least the date of the first score.
- **5.06** *Inflammatory bowel disease (IBD)* documented by endoscopy, biopsy, appropriate medically acceptable imaging, or operative findings with:
- **A.** Obstruction of stenotic areas (not adhesions) in the small intestine or colon with proximal dilatation, confirmed by appropriate medically acceptable imaging or in surgery, requiring hospitalization for intestinal decompression or for surgery, and occurring on at least two occasions at least 60 days apart within a consecutive 6month period;

OR

- **B.** Two of the following despite continuing treatment as prescribed and occurring within the same consecutive 6-month period:
- 1. Anemia with hemoglobin of less than 10.0 g/dL, present on at least two evaluations at least 60 days apart; or
- 2. Serum albumin of 3.0 g/dL or less, present on at least two evaluations at least 60 days apart; or
- 3. Clinically documented tender abdominal mass palpable on physical examination with abdominal pain or cramping that is not completely controlled by prescribed narcotic medication, present on at least two evaluations at least 60 days apart; or
- 4. Perineal disease with a draining abscess or fistula, with pain that is not completely controlled by prescribed narcotic medication, present on at least two evaluations at least 60 days apart; or
- 5. Involuntary weight loss of at least 10 percent from baseline, as computed in pounds, kilograms, or BMI, present on at least two evaluations at least 60 days apart; or
- 6. Need for supplemental daily enteral nutrition via a gastrostomy or daily parenteral nutrition via a central venous catheter.
- **5.07** *Short bowel syndrome (SBS)*, due to surgical resection of more than one-half of the small intestine, with dependence on daily parenteral nutrition via a central venous catheter (see 5.00F).
- **5.08** Weight loss due to any digestive disorder despite continuing treatment as prescribed, with BMI of less than 17.50 calculated on at least two evaluations at least 60 days apart within a consecutive 6-month period.

**5.09** *Liver transplantation.* Consider under a disability for 1 year following the date of transplantation; thereafter, evaluate the residual impairment(s) (see 5.00D12 and 5.00H).