



Clinical Diagnostic Laboratory Services

Health & Human Services Department Centers for Medicare & Medicaid Services

7500 Security Boulevard
Baltimore, MD 21244
CMS Email Point of Contact:
CAG Lab NCD@cms.hhs.gov
TDD 410.786.0727

Fu Associates, Ltd.



NCD Manual Changes

Date	Reason	Release	Change	Edit
	*The following section	n respresents	NCD Manual updates fo	r April 2011.
*04/01/11	*Per CR 7290 add ICD- 9-CM code V49.87 to the list of ICD-9-CM codes that Do Not Support Medical Necessity for the Blood Counts (190.15) NCD.	*2011200	*V49.87 Physical restraints status	*NCD 190.15 Blood Counts
	*Transmittal # 2133			
1	The following section	represents N	CD Manual updates for J	January 2011.
01/01/11	Per CR 7204 add ICD-9- CM code 780.66 to the list of covered ICD-9-CM codes for the Thyroid Testing (190.22) NCD.	2011100	780.66 Febrile nonhemolytic transfusion reaction	NCD 190.22 Thyroid Testing
	Transmittal # 2080			
01/01/11	Per CR 7204 delete ICD-9-CM code 780.66 from the list of covered ICD-9-CM codes for the Gamma Glutamyl Transferase (190.32) NCD.	2011100	780.66 Febrile nonhemolytic transfusion reaction	NCD 190.32 Gamma Glutamyl Transferase
	Transmittal # 2080			
	The following section	represents N	CD Manual updates for (October 2010.
10/01/10	Per CR 7057 add ICD- 9-CM codes 780.66, 786.30, 786.31, and 786.39 to the list of covered ICD-9-CM codes for the Human Immuno-deficiency Virus (HIV) Testing (Diagnosis) (190.14) NCD.	2010400	780.66 Febrile nonhemolytic transfusion reaction 786.30 Hemoptysis, unspecified 786.31 Acute idiopathic pulmonary hemorrhage in infants (AIPHI)	190.14 Human Immunodeficiency Virus (HIV) Testing (Diagnosis)
	Transmittal # 2001		786.39 Other hemoptysis	



Date	Reason	Release	Change	Edit
10/01/10	Per CR 7057 delete ICD-9-CM code 786.3 from the list of covered ICD-9-CM codes for the Human Immunodeficiency Virus (HIV) Testiing (Diagnosis) (190.14) NCD. Transmittal # 2001	2010400	786.3 Hemoptysis	190.14 Human Immunodeficiency Virus (HIV) Testing (Diagnosis)
10/01/10	Per CR 7057 add ICD-9-CM codes 832.2, V11.4, V25.11, V25.12, V25.13, V49.86, and V62.85 to the list of Do Not Support Medical Necessity ICD-9-CM codes for the Blood Counts (190.15) NCD. Transmittal # 2001	2010400	832.2 Nursemaid's elbow V11.4 Personal history of combat and operational stress reaction V25.11 Encounter for insertion of intrauterine contraceptive device V25.12 Encounter for removal of intrauterine contraceptive device V25.13 Encounter for removal and reinsertion of intrauterine contraceptive device V49.86 Do not resuscitate status	190.15 Blood Counts
10/01/10	Per CR 7057 delete ICD-9-CM code V25.1 from the list of Do Not Support Medical Necessity ICD-9-CM codes for the Blood Counts (190.15) NCD. Transmittal # 2001	2010400	V25.1 Encounter for insertion of intrauterine contraceptive device	190.15 Blood Counts



Date	Reason	Release	Change	Edit
10/01/10	Per CR 7057 add ICD-9-CM codes 275.01, 275.02, 275.03, 275.09, 287.41, 287.49, 786.30, 786.31, and 786.39 to the list of covered ICD-9-CM codes for the Partial Thromboplastin Time (PTT) (190.16) NCD. Transmittal # 2001	2010400	275.01 Hereditary hemochromatosis 275.02 Hemochromatosis due to repeated red blood cell transfusions 275.03 Other hemochromatosis 275.09 Other disorders of iron metabolism 287.41 Posttransfusion purpura 287.49 Other secondary thrombocytopenia 786.30 Hemoptysis, unspecified 786.31 Acute idiopathic pulmonary hemorrhage in infants (AIPHI)	190.16 Partial Thromboplastin Time (PTT)
10/01/10	Per CR 7057 delete ICD-9-CM codes 275.0, 287.4, and 786.3 from the list of ICD-9-CM codes covered for the Partial Thromboplastin Time (PTT) (190.16) NCD.	2010400	275.0 Disorders of iron metabolism 287.4 Secondary thrombocytopenia 786.3 Hemoptysis	190.16 Partial Thromboplastin Time (PTT)



Date	Reason	Release	Change	Edit
10/01/10	Per CR 7057 add ICD-9-CM codes 275.01, 275.02, 275.03, 275.09, 287.41, 287.49, 786.30, 786.31, 786.39, 999.80, 999.83, 999.84, and 999.85 to the list of covered ICD-9-CM codes for the Prothrombin Time (190.17) NCD. Transmittal # 2001	2010400	275.01 Hereditary hemochromatosis 275.02 Hemochromatosis due to repeated red blood cell transfusions 275.03 Other hemochromatosis 275.09 Other disorders of iron metabolism 287.41 Posttransfusion purpura 287.49 Other secondary thrombocytopenia 786.30 Hemoptysis, unspecified 786.31 Acute idiopathic pulmonary hemorrhage in infants (AIPHI) 786.39 Other hemoptysis 999.80 Transfusion reaction, unspecified 999.83 Hemolytic transfusion reaction, incompatibility unspecified 999.84 Acute hemolytic transfusion reaction, incompatibility unspecified 999.85 Delayed hemolytic transfusion reaction, incompatibility unspecified	190.17 Prothrombin Time
10/01/10	Per CR 7057 delete ICD-9-CM codes 275.0, 287.4, and 786.3 from the list of covered ICD-9- CM codes covered for the Prothrombin Time (190.17) NCD.	2010400	275.0 Disorders of iron metabolism 287.4 Secondary thrombocytopenia 786.3 Hemoptysis	190.17 Prothrombin Time



Date	Reason	Release	Change	Edit
10/01/10	Per CR 7057 add ICD-9-CM codes 237.73, 237.79, 275.01, 275.02, 275.03, 275.09, 287.41, 287.49, 999.80, 999.83, 999.84, and 999.85 to the list of covered ICD-9-CM codes for the Serum Iron Studies (190.18) NCD. Transmittal # 2001	2010400	237.73 Schwannomatosis 237.79 Other neurofibromatosis 275.01 Hereditary hemochromatosis 275.02 Hemochromatosis due to repeated red blood cell transfusions 275.03 Other hemochromatosis 275.09 Other disorders of iron metabolism 287.41 Posttransfusion purpura 287.49 Other secondary thrombocytopenia 999.80 Transfusion reaction, unspecified 999.83 Hemolytic transfusion reaction, incompatibility unspecified 999.84 Acute hemolytic transfusion reaction, incompatibility unspecified 999.85 Delayed hemolytic transfusion reaction, incompatibility unspecified	190.18 Serum Iron Studies
10/01/10	Per CR 7057 delete ICD-9-CM codes 275.0 and 287.4 from the list of covered ICD-9-CM codes for the Serum Iron Studies (190.18) NCD.	2010400	275.0 Disorders of iron metabolism 287.4 Secondary thrombocytopenia	190.18 Serum Iron Studies



Date	Reason	Release	Change	Edit
10/01/10	Reason Per CR 7057 add ICD-9- CM codes 275.01, 275.02, 275.03, 275.09, 276.61, 276.69, 780.33, 787.60, 787.61, 787.62, and 787.63 to the list of covered ICD-9-CM codes for the Blood Glucose Testing (190.20) NCD. Transmittal # 2001	Release 2010400	Change 275.01 Hereditary hemochromatosis 275.02 Hemochromatosis due to repeated red blood cell transfusions 275.03 Other hemochromatosis 275.09 Other disorders of iron metabolism 276.61 Transfusion associated circulatory overload 276.69 Other fluid overload 780.33 Post traumatic seizures 787.60 Full incontinence of feces 787.61 Incomplete defecation 787.62 Fecal smearing	Edit 190.20 Blood Glucose Testing
			787.63 Fecal urgency	
10/01/10	Per CR 7057 delete ICD-9-CM codes 275.0, 276.6, and 787.6 from the list of covered ICD-9- CM codes for the Blood Glucose Testing (190.20) NCD.	2010400	275.0 Disorders of iron metabolism 276.6 Fluid overload 787.6 Incontinence of feces	190.20 Blood Glucose Testing
	Transmittal # 2001			



Date	Reason	Release	Change	Edit
10/01/10	Per CR 7057 add ICD-9-CM codes 275.01, 275.02, 275.03, and 275.09 to the list of covered ICD-9-CM codes for the Glycated Hemoglobin/ Glycated Protein (190.21) NCD. Transmittal # 2001	2010400	275.01 Hereditary hemochromatosis 275.02 Hemochromatosis due to repeated red blood cell transfusions 275.03 Other hemochromatosis 275.09 Other disorders of iron metabolism	190.21 Glycated Hemoglobin/Glycated Protein
10/01/10	Per CR 7057 delete ICD-9-CM code 275.0 from the list of covered ICD-9-CM codes for the Glycated Hemoglobin/ Glycated Protein (190.21) NCD. Transmittal # 2001	2010400	275.0 Disorders of iron metabolism	190.21 Glycated Hemoglobin/Glycated Protein
10/01/10	Per CR 7057 add ICD-9- CM code 278.03 to the list of covered ICD-9-CM codes for the Lipids Testing (190.23) NCD.	2010400	278.03 Obesity hypoventilation syndrome	190.23 LipidsTesting
10/01/10	Per CR 7057 add ICD-9-CM codes 276.61 and 276.69 to the list of covered ICD-9-CM codes for the Digoxin Therapeutic Drug Assay (190.24) NCD. Transmittal # 2001	2010400	276.61 Transfusion associated circulatory overload 276.69 Other fluid overload	190.24 Digoxin Therapeutic Drug Assay
10/01/10	Per CR 7057 delete ICD-9-CM code 276.6 from the list of covered ICD-9-CM codes for the Digoxin Therapeutic Drug Assay (190.24) NCD. Transmittal # 2001	2010400	276.6 Fluid overload	190.24 Digoxin Therapeutic Drug Assay



Date	Reason	Release	Change	Edit
10/01/10	Per CR 7057 add ICD-9-CM codes 275.01, 275.02, 275.03, and 275.09 to the list of covered ICD-9-CM codes for the Alphafetoprotein (190.25) NCD. Transmittal # 2001	2010400	275.01 Hereditary hemochromatosis 275.02 Hemochromatosis due to repeated red blood cell transfusions 275.03 Other hemochromatosis 275.09 Other disorders of iron metabolism	190.25 Alpha-fetoprotein
10/01/10	Per CR 7057 delete ICD-9-CM code 275.0 from the list of ICD-9-CM codes for the Alpha- fetoprotein (190.25) NCD. Transmittal # 2001	2010400	275.0 Disorders of iron metabolism	190.25 Alpha-fetoprotein
10/01/10	Per CR 7057 add ICD-9-CM codes 237.73, 237.79, 275.01, 275.02, 275.03, 275.09, 560.32, 780.66, 970.81, and 970.89 to the list of covered ICD-9-CM codes for the Gamma Glutamyl Transferase (190.32) NCD. Transmittal # 2001	2010400	237.73 Schwannomatosis 237.79 Other neurofibromatosis 275.01 Hereditary hemochromatosis 275.02 Hemochromatosis due to repeated red blood cell transfusions 275.03 Other hemochromatosis 275.09 Other disorders of iron metabolism 560.32 Fecal impaction 780.66 Febrile nonhemolytic transfusion reaction 970.81 Poisoning by cocaine 970.89 Poisoning by other central nervous system stimulants	190.32 Gamma Glutamyl Transferase



Date	Reason	Release	Change	Edit
10/01/10	Per CR 7057 delete ICD-9-CM codes 275.0 and 970.8 from the list of covered ICD-9-CM codes for the Gamma Glutamyl Transferase (190.32) NCD.	2010400	275.0 Disorders of iron metabolism 970.8 Poisoning by other specified central nervous system stimulants	190.32 Gamma Glutamyl Transferase
10/01/10	Per CR 7057 add ICD-9-CM code 780.33 to the list of covered ICD-9-CM codes for the Hepatitis Panel/Acute Hepatitis Panel (190.33) NCD. Transmittal # 2001	2010400	780.33 Post traumatic seizures	190.33 Hepatitis Panel/Acute Hepatitis Panel
10/01/10	Per CR 7057 add ICD-9-CM codes 287.41, 287.49, and 560.32 to the list of covered ICD-9-CM codes for the Fecal Occult Blood Test (190.34) NCD. Transmittal # 2001	2010400	287.41 Posttransfusion purpura 287.49 Other secondary thrombocytopenia 560.32 Fecal impaction	190.34 Fecal Occult Blood Test
10/01/10	Per CR 7057 delete ICD-9-CM code 287.4 from the list of covered ICD-9-CM codes for the Fecal Occult Blood Test (190.34) NCD.	2010400	287.4 Secondary thrombocytopenia	190.34 Fecal Occult Blood Test
	The following section	n represents	NCD Manual updates for	r July 2010.
07/01/10	Per CR 6964 delete ICD-9-CM codes V17.4 and V18.1 from the list of ICD-9-CM codes that are non-covered by Medicare for all Lab NCD Edits. Transmittal # 1963	2010300	V17.4 Family history of other cardiovascular diseases V18.1 Family history of other endocrine and metabolic diseases	All NCD Edits



Date	Reason	Release	Change	Edit	
07/01/10	Per CR 6964 add ICD-9-CM codes V17.41, V17.49, V18.11 and V18.19 to the list of ICD-9-CM codes that are non-covered by Medicare for all Lab NCD Edits. Transmittal # 1963	2010300	V17.41 Family history of sudden cardiac death (SCD) V17.49 Family history of other cardiovascular diseases V18.11 Family history of multiple endocrine neoplasia (MEN) syndrome V18.19 Family history of other endocrine and metabolic diseases	All NCD Edits	
07/01/10	To correct a missing entry in prior versions of this Manual, the ICD-9-CM code V61.11 and its descriptor have been added as a single row in the table "ICD-9-CM codes that Do Not Support Medical Necessity" in Section "190.15 – Blood Counts".	2010300	V61.11 Counseling for victim of spousal and partner abuse	190.15 Blood Counts	
	The following section represents NCD Manual updates for April 2010.				
04/01/10		There were no CR updates for April 2010.			



Table of Contents

NCD Manual Changes	ii
Table of Contents	xii
Introduction	1
Non-covered ICD-9-CM Codes for All NCD Edits	4
Reasons for Denial for All NCD Edits	6
Coding Guidelines for All NCD Edits	7
Additional Coding Guidelines	8
190.12 - Urine Culture, Bacterial	12
190.13 - Human Immunodeficiency Virus (HIV)Testing (Prognosis Including Mo	nitoring)18
190.14 - Human Immunodeficiency Virus (HIV) Testing (Diagnosis)	20
190.15 - Blood Counts	28
190.16 - Partial Thromboplastin Time (PTT)	39
190.17 - Prothrombin Time (PT)	50
190.18 - Serum Iron Studies	65
190.19 - Collagen Crosslinks, Any Method	77
190.20 - Blood Glucose Testing	80
190.21 - Glycated Hemoglobin/Glycated Protein	87
190.22 - Thyroid Testing	90
190.23 - Lipids Testing	98
190.24 - Digoxin Therapeutic Drug Assay	105
190.25 - Alpha-fetoprotein	110
190.26 - Carcinoembryonic Antigen	113
190.27 - Human Chorionic Gonadotropin	116
190.28 - Tumor Antigen by Immunoassay CA 125	118
190.29 - Tumor Antigen by Immunoassay CA 15-3/CA 27.29	120
190.30 - Tumor Antigen by Immunoassay CA 19-9	122
190.31 - Prostate Specific Antigen	124
190.32 - Gamma Glutamyl Transferase	127
190.33 - Hepatitis Panel/Acute Hepatitis Panel	139
190.34 - Fecal Occult Blood Test	143



Introduction

Background

Section 4554(b)(1) of the Balanced Budget Act of 1997 (BBA), Public Law 105-33, mandated the use of a negotiated rulemaking committee to develop national coverage and administrative policies for clinical diagnostic laboratory services payable under Medicare Part B by January 1, 1999. This provision requires that these national coverage policies be designed to promote program integrity and national uniformity and simplify administrative requirements with respect to clinical diagnostic laboratory services in connection with the following:

Beneficiary information required to be submitted with each claim or order for laboratory services; The medical condition for which a laboratory test is reasonable and necessary (within the meaning of section 1862(a)(1)(A) of the Social Security Act); The appropriate use of procedure codes in billing for a laboratory test, including the unbundling of laboratory services; The medical documentation that is required by a Medicare contractor at the time a claim is submitted for a laboratory test (in accordance with section 1833(e) of the Act); Record keeping requirements in addition to any information required to be submitted with a claim, including physicians' obligations regarding these requirements; Procedures for filing claims and for providing remittances by electronic media; and Limitations on frequency of coverage for the same services performed on the same individual.

On March 10, 2000, a proposed rule was published in the <u>Federal Register</u> (65 FR 13082) that set forth uniform national coverage and administrative policies for clinical diagnostic laboratory services. These proposed policies reflected the consensus of the Negotiated Rulemaking Committee. The final rule, published in the <u>Federal Register</u> on November 23, 2001 (66 FR 58788), addresses the public comments received on the proposed rule. The final rule established the national coverage and administrative policies for clinical diagnostic laboratory services payable under Medicare Part B. It promotes Medicare program integrity and national uniformity, and simplifies administrative requirements for clinical diagnostic services. There are 23 national coverage determinations included in the final rule listed below:

- o Culture, Bacterial, Urine
- Human Immunodeficiency Virus Testing (Prognosis including monitoring)
- Human Immunodeficiency Virus Testing (Diagnosis)
- o Blood Counts
- Partial Thromboplastin Time
- Prothrombin Time
- o Serum Iron Studies
- Collagen Crosslinks, Any Method
- Blood Glucose Testing
- Glycated Hemoglobin/Glycated Protein
- Thyroid Testing
- o Lipids
- Digoxin Therapeutic Drug Assay
- o Alpha-fetoprotein



- o Carcinoembryonic Antigen
- o Human Chorionic Gonadotropin
- Tumor Antigen by Immunoassay CA125
- Tumor Antigen by Immunoassay CA 15-3/CA 27.29
- Tumor Antigen by Immunoassay CA 19-9
- Prostate Specific Antigen
- o Gamma Glutamyl Transferase
- Hepatitis Panel/Acute Hepatitis Panel
- Fecal Occult Blood

What Is a National Coverage Policy?

Part B of title XVIII of the Social Security Act (the Act) provides for Supplementary Medical Insurance (SMI) for certain Medicare beneficiaries, specifying what health care items or services will be covered by the Medicare Part B program. Diagnostic laboratory tests are generally covered under Part B, unless excluded from coverage by the Act. Services that are excluded from coverage include routine physical examinations and services that are not reasonable and necessary for the diagnosis or treatment of an illness or injury. CMS interprets these provisions to prohibit coverage of screening services, including laboratory tests furnished in the absence of signs, symptoms, or personal history of disease or injury, except as explicitly authorized by statute. A test may be considered medically appropriate, but nonetheless be excluded from Medicare coverage by statute. A national coverage policy for diagnostic laboratory test(s) is a document stating CMS's policy with respect to the circumstances under which the test(s) will be considered reasonable and necessary, and not screening, for Medicare purposes. Such a policy applies nationwide. A national coverage policy is neither a practice parameter nor a statement of the accepted standard of medical practice. Words such as "may be indicated" or "may be considered medically necessary" are used for this reason. Where a policy gives a general description and then lists examples (following words like "for example" or "including"), the list of examples is not meant to be all-inclusive but to provide some guidance.

What Is the Effect of a National Coverage Policy?

A national coverage policy to which this introduction applies is a National Coverage Decision (NCD) under section 1862(a) (1) of the Social Security Act. Regulations on National Coverage Decisions are codified at 42 CFR 405.732(b)–(d). A Medicare contractor may not develop a local policy that conflicts with a national coverage policy.

What Is the Format for These National Coverage Policies?

Below are the headings for national coverage policies, developed by the Negotiated Rulemaking Committee on Clinical Diagnostic Laboratory Tests.

Other Names/Abbreviations

This section identifies other names for the policy. It reflects more colloquial terminology.

Description

This section includes a description of the test(s) addressed by the policy and provides a general description of the appropriate uses of the test(s).



HCPCS Codes

The descriptor(s) used in this section is (are) the Current Procedural Terminology (CPT) or other CMS Common Procedure Coding System (HCPCS). The CPT is developed and copyrighted by the American Medical Association (AMA). If a descriptor does not accurately or fully describe the test, a more complete description may be included elsewhere in the policy, such as in the Indications section.

ICD-9-CM Codes Covered by Medicare Program

This section includes covered codes—those where there is a presumption of medical necessity, but the claim is subject to review to determine whether the test was in fact reasonable and necessary. The diagnosis codes are from the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM). Where the policy takes an "exclusionary" approach, as described below, this section states: "Any ICD–9–CM code not listed in either of the ICD–9–CM code sections below."

Indications

This section lists detailed clinical indications for Medicare coverage of the test(s).

Limitations

This section lists any national frequency expectations, as well as other limitations on Medicare coverage of the specific test(s) addressed in the policy—for example, if it would be unnecessary to perform a particular test with a particular combination of diagnoses.

ICD-9-CM Codes That Do Not Support Medical Necessity

This section lists/describes generally non-covered codes for which there are only limited exceptions. However, additional documentation could support a determination of medical necessity in certain circumstances. Subject to section 1879 of the Social Security Act (the Act), 42 CFR 411, subpart K, section 7330 of the Medicare Carriers Manual section 3440–3446.9 of the Medicare Fiscal Intermediary Manual and any applicable rulings, it would be appropriate for the ordering physician or the laboratory to obtain an advance beneficiary notice from the beneficiary. Where the policy takes an "inclusionary" approach, as described below, this section states: "Any ICD-9-CM code not listed in either of the ICD-9-CM sections above."

Other Comments

This section may contain other relevant comments that are not addressed in the sections above.

Documentation Requirements

This section refers to documentation requirements for clinical diagnostic laboratory tests at 42 CFR 410.32(d) and includes any specific documentation requirements related to the test(s) addressed in the policy.

Sources of Information

Relevant sources of information used in developing the policy are listed in this section.



Non-covered ICD-9-CM Codes for All NCD Edits

This section lists codes that are never covered. If a code from this section is given as the reason for the test, the test may be billed to the Medicare beneficiary without billing Medicare first because the service is not covered by statute, in most instances because it is performed for screening purposes and is not within an exception. The beneficiary, however, does have a right to have the claim submitted to Medicare, upon request.

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
798.0 - 798.9	Sudden death, cause unknown
V15.85	Personal history of contact with and (suspected) exposure to potentially hazardous body fluids
V16.1	Family history of malignant neoplasm, trachea, bronchus, and lung
V16.2	Family history of malignant neoplasm, other respiratory and intrathoracic organs
V16.40	Family history of malignant neoplasm, genital organs
V16.50	Family history of malignant neoplasm, urinary organs
V16.51	Family history of malignant neoplasm, kidney
V16.52	Family history of malignant neoplasm, bladder
V16.59	Family history of malignant neoplasm, other
V16.6	Family history of malignant neoplasm, leukemia
V16.7	Family history of malignant neoplasm, other lymphatic and hematopoietic neoplasms
V16.8	Family history of malignant neoplasm, other specified malignant neoplasm
V16.9	Family history of malignant neoplasm, unspecified malignant neoplasm
V17.0-V17.3	Family history of certain chronic disabling diseases
V17.41	Family history of sudden cardiac death (SCD)
V17.49	Family history of other cardiovascular diseases
V17.5 - V17.89	Family history of asthma; other chronic respiratory conditions arthritis; other musculoskeletal diseases
V18.0	Family history of diabetes mellitus
V18.11	Family history of multiple endocrine neoplasia (MEN) syndrome
V18.19	Family history of other endocrine and metabolic diseases
V18.2-V18.4, V18.51,V18.59, V18.61, V18.69, V18.7-V18.9	Family history of anemia; other blood disorders; mental retardation; colonic polyps; other digestive disorders; polycystic kidney; other kidney diseases; other genitourinary diseases; infectious and parasitic diseases; genetic disease carrier
V19.0 - V19.8	Family history of other conditions
V20.0 - V20.2	Health supervision of infant or child
V20.31	Health supervision for newborn under 8 days old



Code	Description
V20.32	Health supervision for newborn 8 to 28 days old
V28.0 - V28.9	Encounter for antenatal screening of mother
V50.0 - V50.9	Elective surgery for purposes other than remedying health states
V53.2	Hearing aid
V60.0-V60.6	Lack of housing; inadequate housing; lack of material resources; person living alone; no other household person avle to render care; holiday relief care; and person living in residential institution
V60.81	Foster care (status)
V60.89	Other specified housing or economic circumstances
V60.9	Unspecified housing or economic circumstances
V62.0	Unemployment
V62.1	Adverse effects of work environment
V65.0	Healthy persons accompanying sick persons
V65.11	Pediatric pre-birth visit for expectant parent(s)
V65.19	Other person consulting on behalf of another person
V68.0 - V68.9	Encounters for administrative purposes
V70.0 - V70.9	General medical examinations
V73.0-V73.6	Special screening examinations for viral and chlamydia diseases
V73.81	Special screening examinations for Human papillomavirus (HPV)
V73.88-V73.89	Other specified chlamydial and viral diseases
V73.98-V73.99	Unspecified chlamydial and viral disease
V74.0 - V74.9	Special screening examinations for bacterial and spirochetal diseases
V75.0 - V75.9	Special screening examination for other infectious diseases
V76.0	Special screening for malignant neoplasms, respiratory organs
V76.3	Special screening for malignant neoplasms, bladder
V76.42-V76.43, V76.45- V76.47, V76.49, V76.50, V76.52, V76.81, V76.89, V76.9	Special screening for malignant neoplasms,(sites other than breast, cervix, and rectum)
V77.0	Special screening for endocrine, nutrition, metabolic, and immunity disorders
V77.2-V77.99	Special screening for endocrine, nutrition, metabolic, and immunity disorders
V78.0-V78.9	Special screening for disorders of blood and blood-forming organs
V79.0-V79.9	Special screening for mental disorders
V80.01	Special screening for traumatic brain injury
V80.09	Special screening for other neurological conditions
V80.1-V80.3	Special screening for glaucoma and other eye conditions; ear diseases
V81.3-V81.6	Special screening for cardiovascular, respiratory, and genitourinary diseases
V82.0-V82.6, V82.71,V82.79, V82.81, V82.89, V82.9	Special screening for other conditions



Reasons for Denial for All NCD Edits

NOTE: This section has not been negotiated by the Negotiated Rulemaking Committee. It includes CMS's interpretation of its longstanding policies and is included for informational purposes.

- Tests for screening purposes that are performed in the absence of signs, symptoms, complaints, or personal history of disease or injury are not covered except as explicitly authorized by statute. These include exams required by insurance companies, business establishments, government agencies, or other third parties.
- Tests that are not reasonable and necessary for the diagnosis or treatment of an illness or injury are not covered according to the statute.
- o Failure to provide documentation of the medical necessity of tests may result in denial of claims. The documentation may include notes documenting relevant signs, symptoms, or abnormal findings that substantiate the medical necessity for ordering the tests. In addition, failure to provide independent verification that the test was ordered by the treating physician (or qualified nonphysician practitioner) through documentation in the physician's office may result in denial.
- A claim for a test for which there is a national coverage or local medical review policy will be denied as not reasonable and necessary if it is submitted without an ICD-9-CM code or narrative diagnosis listed as covered in the policy unless other medical documentation justifying the necessity is submitted with the claim.
- o If a national or local policy identifies a frequency expectation, a claim for a test that exceeds that expectation may be denied as not reasonable and necessary, unless it is submitted with documentation justifying increased frequency.
- Tests that are not ordered by a treating physician or other qualified treating nonphysician practitioner acting within the scope of their license and in compliance with Medicare requirements will be denied as not reasonable and necessary.
- Failure of the laboratory performing the test to have the appropriate Clinical Laboratory Improvement Amendments of 1988 (CLIA) certificate for the testing performed will result in denial of claims.



Coding Guidelines for All NCD Edits

- Any claim for a clinical diagnostic laboratory service must be submitted with an ICD-9-CM diagnosis code. Codes that describe symptoms and signs, as opposed to diagnosis, should be provided for reporting purposes when a diagnosis has not been established by the physician. (Based on Coding Clinic for ICD-9-CM, Fourth Quarter 1995, page 43).
- 2. Screening is the testing for disease or disease precursors so that early detection and treatment can be provided for those who test positive for the disease. Screening tests are performed when no specific sign, symptom, or diagnosis is present and the patient has not been exposed to a disease. The testing of a person to rule out or to confirm a suspected diagnosis because the patient has a sign and/or symptom is a diagnostic test, not a screening. In these cases, the sign or symptom should be used to explain the reason for the test. When the reason for performing a test is because the patient has had contact with, or exposure to, a communicable disease, the appropriate code from category V01, Contact with or exposure to communicable diseases, should be assigned, not a screening code, but the test may still be considered screening and not covered by Medicare. For screening tests, the appropriate ICD-9-CM screening code from categories V28 or V73-V82 (or comparable narrative) should be used. (From Coding Clinic for ICD-9-CM, Fourth Quarter 1996, pages 50 and 52).
- 3. A three-digit code is to be used only if it is not further subdivided. Where fourth-digit and/or fifth-digit sub-classifications are provided, they must be assigned. A code is invalid if it has not been coded to the full number of digits required for that code. (From Coding Clinic for ICD-9-CM. Fourth Quarter, 1995, page 44).
- 4. Diagnoses documented as "probable," "suspected," "questionable," "rule-out," or "working diagnosis" should not be coded as though they exist. Rather, code the condition(s) to the highest degree of certainty for that encounter/visit, such as signs, symptoms, abnormal test results, exposure to communicable disease or other reasons for the visit. (From Coding Clinic for ICD-9-CM, Fourth Quarter 1995, page 45).
- 5. When a non-specific ICD-9 code is submitted, the underlying sign, symptom, or condition must be related to the indications for the test.

Fu Associates, Ltd. 7 April 2011



Additional Coding Guidelines

190.12 - Urine Culture, Bacterial

- 1. Specific coding guidelines:
 - a. Use CPT 87086 Culture, bacterial, urine; quantitative, colony count where a urine culture colony count is performed to determine the approximate number of bacteria present per milliliter of urine. The number of units of service is determined by the number of specimens.
 - b. Use CPT 87088 where a commercial kit uses manufacturer defined media for isolation, presumptive identification, and quantitation of morphotypes present. The number of units of service is determined by the number of specimens.
 - c. Use CPT 87088 where identification of morphotypes recovered by quantitative culture or commercial kits and deemed to represent significant bacteriuria requires the use of additional testing, for example, biochemical test procedures on colonies. Identification based solely on visual observation of the primary media is usually not adequate to justify use of this code. The number of units of service is determined by the number of isolates.
 - d. Use CPT 87184 or 87186 where susceptibility testing of isolates deemed to be significant is performed concurrently with identification. The number of units of service is determined by the number of isolates. These codes are not exclusively used for urine cultures but are appropriate for isolates from other sources as well.
 - e. Appropriate combinations are as follows: CPT 87086, 1 per specimen with 87088, 1 per isolate and 87184 or 87186 where appropriate.
 - f. Culture for other specific organism groups not ordinarily recovered by media used for aerobic urine culture may require use of additional CPT codes (for example, anaerobes from suprapubic samples).
 - g. Identification of isolates by non-routine, nonbiochemical methods may be coded appropriately (for example, immunologic identification of streptococci, nucleic acid techniques for identification of N. gonorrhoeae).
 - h. While infrequently used, sensitivity studies by methods other than CPT 87184 or 87186 are appropriate. CPT 87181, agar dilution method, each antibiotic or CPT 87188, macrotube dilution method, each antibiotic may be used. The number of units of service is the number of antibiotics multiplied by the number of unique isolates.
- 2. ICD-9-CM code 780.02, 780.9 or 799.3 should be used only in the situation of an elderly patient, immunocompromised patient or patient with neurologic disorder who presents without typical manifestations of a urinary tract infection but who presents with one of the following signs or symptoms, not otherwise explained by another co-existing condition: increasing debility; declining functional status; acute mental changes; changes in awareness; or hypothermia.
- 3. In cases of post renal-transplant urine culture used to detect clinically significant occult infection in patients on long term immunosuppressive therapy, use code V58.69.



190.13 - Human Immunodeficiency Virus (HIV) Testing

(Prognosis Including Monitoring)

- 1. Specific coding guidelines:
 - a. Temporary code G0100 has been superseded by code 87536 effective January 1, 1998.
 - b. CPT codes for quantification should not be used simultaneously with other nucleic acid detection codes for HIV-1 (that is, 87534, 87535) or HIV-2 (that is, 87537, 87538).
- 2. Codes 647.60-647.64 should only be used for HIV infections complicating pregnancy.

190.14 - Human Immunodeficiency Virus (HIV) Testing (Diagnosis)

- 1. Specific coding guidelines:
 - a. CPT 86701 or 86703 is performed initially. CPT 86702 is performed when 86701 is negative and clinical suspicion of HIV-2 exists.
 - b. CPT 86689 is performed only on samples repeatedly positive by 86701, 86702, or 86703.
 - c. CPT 87534 or 87535 is used to detect HIV-1 RNA where indicated. CPT 87537 or 87538 is used to detect HIV-2 RNA where indicated.

190.16 – Partial Thromboplastin Time (PTT)

- 1. When patients are being converted from heparin therapy to warfarin therapy, use code V58.61 to document the medical necessity of the PTT.
- 2. When coding for Disseminated Intravascular Coagulation (DIC), use 286.6 or code for the signs and symptoms clinically indicating DIC.
- 3. If a specific condition is known and is the reason for a pre-operative test, submit the clinical text description or ICD-9-CM code describing the condition with the order/referral. If a specific condition or disease is not known, and the pre-operative test is for pre-operative clearance only, assign code V72.84.
- 4. Assign codes 289.8 other specified disease of blood and blood-forming organs only when a specific disease exists and is indexed to 289.8, (for example, myelofibrosis). Do not assign code 289.8 to report a patient on long term use of anticoagulant therapy (for example, to report a PTT value or re-check need for medication adjustment.) Assign code V58.61 to referrals for PTT checks or re-checks. (Reference AHA's Coding Clinic, March-April, pg 12 1987, 2nd quarter pg 8 1989)

190.17 – Prothrombin Time (PT)

- If a specific condition is known and is the reason for a pre-operative test, submit the text description or ICD-9-CM code describing the condition with the order/referral. If a specific condition or disease is not known, and the pre-operative test is for preoperative clearance only, assign code V72.84.
- 2. Assign codes 289.8 other specified disease of blood and blood-forming organs only when a specific disease exists and is indexed to 289.8 (for example, myelofibrosis). Do not assign code 289.8 to report a patient on long term use of anticoagulant therapy (e.g. to report a PT value or re-check need for medication adjustment.) Assign code



V58.61 to referrals for PT checks or re-checks. (Reference AHA's Coding Clinic, March-April, pg 12 – 1987, 2nd quarter pg 8 – 1989)

190.19 - Collagen Crosslinks, Any Method

1. When the indication for the test is long-term administration of glucocorticosteroids, use ICD-9-CM code V58.69.

190.20 – Blood Glucose Testing

- 1. A diagnostic statement of impaired glucose tolerance must be evaluated in the context of the documentation in the medical record in order to assign the most accurate ICD-9-CM code. An abnormally elevated fasting blood glucose level in the absence of the diagnosis of diabetes is classified to Code 790.6 other abnormal blood chemistry. If the provider bases the diagnostic statement of impaired glucose tolerance" on an abnormal glucose tolerance test, the condition is classified to 790.2 -- normal glucose tolerance test. Both conditions are considered indications for ordering glycated hemoglobin or glycated protein testing in the absence of the diagnosis of diabetes mellitus.
- 2. When a patient is under treatment for a condition for which the tests in this policy are applicable, the ICD-9-CM code that best describes the condition is most frequently listed as the reason for the test.
- 3. When laboratory testing is done solely to monitor response to medication, the most accurate ICD-9-CM code to describe the reason for the test would be V58.69 -- long term use of medication.
- 4. Periodic follow-up for encounters for laboratory testing for a patient with a prior history of a disease, who is no longer under treatment for the condition, would be coded with an appropriate code from the V67 category -- follow-up examination.
- 5. According to ICD-9-CM coding conventions, codes that appear in italics in the Alphabetic and/or Tabular columns of ICD-9-CM are considered manifestation codes that require the underlying condition to be coded and sequenced ahead of the manifestation. For example, the diagnostic statement, "thyrotoxic exophthalmos (376.21)," which appears in italics in the tabular listing, requires that the thyroid disorder (242.0-242.9) is coded and sequenced ahead of thyrotoxic exophthalmos. Therefore, a diagnostic statement that is listed as a manifestation in ICD-9-CM must be expanded to include the underlying disease in order to accurately code the condition.

190.21 - Glycated Hemoglobin/Glycated Protein

1. A diagnostic statement of impaired glucose tolerance must be evaluated in the context of the documentation in the medical record in order to assign the most accurate ICD-9-CM code. An abnormally elevated fasting blood glucose level in the absence of the diagnosis of diabetes is classified to Code 790.6 - other abnormal blood chemistry. If the provider bases the diagnostic statement of impaired glucose tolerance" on an abnormal glucose tolerance test, the condition is classified to 790.2 -- normal glucose tolerance test. Both conditions are considered indications for ordering glycated hemoglobin or glycated protein testing in the absence of the diagnosis of diabetes mellitus.



190.22 - Thyroid Testing

- 1. When a patient is under treatment for a condition for which the tests in this policy are applicable, the ICD-9-CM code that best describes the condition is most frequently listed as the reason for the test.
- 2. When laboratory testing is done solely to monitor response to medication, the most accurate ICD-9-CM code to describe the reason for the test would be V58.69 long term use of medication.
- 3. Periodic follow-up for encounters for laboratory testing for a patient with a prior history of a disease, who is no longer under treatment for the condition, would be coded with an appropriate code from the V67 category -- follow-up examination.
- 4. According to ICD-9-CM coding conventions, codes that appear in italics in the Alphabetic and/or Tabular columns of ICD-9-CM are considered manifestation codes that require the underlying condition to be coded and sequenced ahead of the manifestation. For example, the diagnostic statement "thyrotoxic exophthalmos (376.21)," which appears in italics in the tabular listing, requires that the thyroid disorder (242.0-242.9) is coded and sequenced ahead of thyrotoxic exophthalmos. Therefore, a diagnostic statement that is listed as a manifestation in ICD-9-CM must be expanded to include the underlying disease in order to accurately code the condition.
- 5. Use code 728.9 to report muscle weakness as the indication for the test. Other diagnoses included in 728.9 do not support medical necessity.
- 6. Use code 194.8 (Malignant neoplasm of other endocrine glands and related structures, other) to report multiple endocrine neoplasia syndromes (MEN-1 and MEN-2). Other diagnoses included in 194.8 do not support medical necessity.

190.26 - Carcinoembryonic Antigen

1. To show elevated CEA, use ICD-9-CM 790.99 (Other nonspecific findings on examination of blood) only if a more specific diagnosis has not been made. If a more specific diagnosis has been made, use the code for that diagnosis.

190.31 – Prostate Specific Antigen

1. To show elevated PSA, use ICD-9-CM code 790.93 (Elevated prostate specific antigen). If a more specific diagnosis code has been made, use the code for that diagnosis.



190.12 - Urine Culture, Bacterial

Previously Listed as Edit 1

Other Names/Abbreviations

Urine culture

Description

A bacterial urine culture is a laboratory procedure performed on a urine specimen to establish the probable etiology of a presumed urinary tract infection. It is common practice to do a urinalysis prior to a urine culture. A urine culture may also be used as part of the evaluation and management of another related condition. The procedure includes aerobic agar-based isolation of bacteria or other cultivable organisms present, and quantitation of types present based on morphologic criteria. Isolates deemed significant may be subjected to additional identification and susceptibility procedures as requested by the ordering physician. The physician's request may be through clearly documented and communicated laboratory protocols.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
87086	Culture, bacterial; quantitative, colony count, urine.
87088	Culture, bacterial; with isolation and presumptive identification of each isolates, urine.
87184 Listed in manual only	Susceptibility studies, antimicrobial agent; disk method, per plate (12 or fewer agents).
87186 Listed in manual only	Susceptibility studies, antimicrobial agent; microdilution or agar dilution (minimum inhibitory concentration (MIC) or breakpoint), each multi-antimicrobial, per plate.

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
003.1	Salmonella septicemia
038.0, 038.10-038.11, 038.12, 038.19, 038.2, 038.3, 038.40-038.44, 038.49, 038.8, 038.9	Septicemia
276.2	Acidosis
276.4	Metabolic acidosis/alkalosis
286.6	Defibrination syndrome/disseminated intravascular coagulation
288.00	Neutropenia, unspecified
288.01	Congenital neutropenia

NCD 190.12



Code	Description
288.02	Cyclic neutropenia
288.03	Drug induced neutropenia
288.04	Neutropenia due to infection
288.09	Other neutropenia
288.8	Other specified disease of white blood cells including leukemoid reaction/leukocytosis
306.53	Psychogenic dysuria
306.59	Other psychogenic genitourinary malfunction
518.82	Other pulmonary insufficiency, not elsewhere classified
570	Acute and subacute necrosis of liver
580.0-580.9	Acute glomerulonephritis
583.0-583.9	Nephritis and Nephropathy, not specified as acute or chronic
585.6	End stage renal disease
590.00-590.9	Infections of kidney/pyelonephritis acute and chronic
592.0-592.9	Calculus of kidney and ureter
593.0-593.9	Other disorders of kidney & ureter (cyst, stricture, obstruction, reflux)
594.0-594.9	Calculus of lower urinary tract
595.0-595.9	Cystitis
597.0	Urethritis, not sexually transmitted and urethral syndrome
597.80-597.89	Other urethritis
598.00-598.01	Urethral stricture due to infection
599.0	Urinary tract infection, site not specified
599.70	Hematuria, unspecified
599.71	Gross hematuria
599.72	Microscopic hematuria
600.00-600.91	Hyperplasia of prostate
601.0-601.9	Inflammatory diseases of prostate
602.0-602.9	Other disorders of prostate (calculus, congestion, atrophy, etc.)
604.0-604.99	Orchitis and epididymitis
608.0 - 608.1, 608.20-608.24, 608.3-608.9	Other disorders of male genital organs (seminal vesiculitis, spermatocele, etc.)
614.0-614.9	Inflammatory disease of ovary, fallopian tube, pelvic cellular tissue, and peritoneum
615.0-615.9	Inflammatory disease of uterus, except cervix
616.0	Cervicitis and endocervicitis
616.10-616.11	Vaginitis and vulvovaginitis
616.2–616.4, 616.50, 616.51, 616.81, 616.89, 616.9	Other inflammatory conditions of cervix, vagina and vulva
619.0-619.9	Fistula involving female genital tract
625.6	Stress incontinence, female
639.0	Genital tract and pelvic infection complicating abortion, ectopic or molar pregnancies

NCD 190.12



Code	Description
639.5	Shock complicating abortion, ectopic or molar pregnancies
646.60-646.64	Infections of genitourinary tract in pregnancy
670.00	Major puerperal infection, unspecified, unspecified as to episode of care or not applicable
670.02	Major puerperal infection, unspecified, delivered, with mention of postpartum complication
670.04	Major puerperal infection, unspecified, postpartum condition or complication
670.10	Puerperal endometritis, unspecified as to episode of care or not applicable
670.12	Puerperal endometritis, delivered, with mention of postpartum complication
670.14	Puerperal endometritis, postpartum condition or complication
670.20	Puerperal sepsis, unspecified as to episode of care or not applicable
670.22	Puerperal sepsis, delivered, with mention of postpartum complication
670.24	Puerperal sepsis, postpartum condition or complication
670.30	Puerperal septic thrombophlebitis, unspecified as to episode of care or not applicable
670.32	Puerperal septic thrombophlebitis, delivered, with mention of postpartum complication
670.34	Puerperal septic thrombophlebitis, postpartum condition or complication
670.80	Other major puerperal infection, unspecified as to episode of care or not applicable
670.82	Other major puerperal infection, delivered, with mention of postpartum complication
670.84	Other major puerperal infection, postpartum condition or complication
672.00-672.04	Pyrexia of unknown origin during the puerperium
724.5	Backache, unspecified
771.81	Septicemia (sepsis) of newborn
771.82	Urinary tract infection of newborn
771.83	Bacteremia of newborn
780.02	General symptoms, transient alteration of awareness
780.60	Fever, unspecified
780.61	Fever presenting with conditions classified elsewhere
780.62	Postprocedural fever
780.63	Postvaccination fever
780.64	Chills (without fever)
780.65	Hypothermia not associated with low environmental temperature
780.66	Febrile nonhemolytic transfusion reaction
780.79	Other malaise and fatigue
780.93	Memory loss
780.94	Early satiety

NCD 190.12



Code	Description
780.96	Generalized pain
780.97	Altered mental status
780.99	Other general symptoms
785.0	Tachycardia, unspecified
785.50-785.59	Shock without mention of trauma
788.0-788.63, 788.64, 788.65, 788.69, 788.7-788.8	Symptoms involving urinary system (renal colic, dysuria, retention of urine, incontinence of urine, frequency, polyuria, nocturia, oliguria, anuria, other abnormality of urination, urethral discharge, extravasation of urine.)
788.91	Functional urinary incontinence
788.99	Other symptoms involving urinary system
789.00-789.09	Abdominal pain
789.60-789.69	Abdominal tenderness
789.7	Colic
790.7	Bacteremia
791.0-791.9	Nonspecific findings on examination of urine (proteinuria, chyluria, hemoglobinuria, myoglobinuria, biliuria, glycosuria, acetonuria, other cells & casts in urine, other nonspecific findings on urine examination)
799.3	Debility, unspecified (only for declining functional status)
939.0	Foreign body in genitourinary tract, bladder and urethra
939.3	Foreign body in genitourinary tract, penis
V44.50-V44.6	Artificial cystostomy or other artificial opening of urinary tract status
V55.5-V55.6	Attention to cystostomy or other artificial opening of urinary tract
V58.69	Long-term (current) use of other medications

Indications

- 1. A patient's urinalysis is abnormal suggesting urinary tract infection, for example, abnormal microscopic (hematuria, pyuria, bacteriuria); abnormal biochemical urinalysis (positive leukocyte esterase, nitrite, protein, blood); a Gram's stain positive for microorganisms; positive bacteriuria screen by a non-culture technique; or other significant abnormality of a urinalysis. While it is not essential to evaluate a urine specimen by one of these methods before a urine culture is performed, certain clinical presentations with highly suggestive signs and symptoms may lend themselves to an antecedent urinalysis procedure where follow-up culture depends upon an initial positive or abnormal test result.
- 2. A patient has clinical signs and symptoms indicative of a possible urinary tract infection (UTI). Acute lower UTI may present with urgency, frequency, nocturia, dysuria, discharge or incontinence. These findings may also be noted in upper UTI with additional systemic symptoms (for example, fever, chills, lethargy); or pain in the costovertebral, abdominal, or pelvic areas. Signs and symptoms may overlap considerably with other inflammatory conditions of the genitourinary tract (for example, prostatitis, urethritis, vaginitis, or cervicitis). Elderly or immunocompromised patients, or patients with neurologic disorders may present atypically (for example, general debility, acute mental status changes, declining functional status).

NCD 190.12



- 3. The patient is being evaluated for suspected urosepsis, fever of unknown origin, or other systemic manifestations of infection but without a known source. Signs and symptoms used to define sepsis have been well established.
- 4. A test-of cure is generally not indicated in an uncomplicated infection. However, it may be indicated if the patient is being evaluated for response to therapy and there is a complicating co-existing urinary abnormality including structural or functional abnormalities, calculi, foreign bodies, or ureteral/renal stents or there is clinical or laboratory evidence of failure to respond as described in Indications 1 and 2.
- 5. In surgical procedures involving major manipulations of the genitourinary tract, preoperative examination to detect occult infection may be indicated in selected cases (for example, prior to renal transplantation, manipulation or removal of kidney stones, or transurethral surgery of the bladder or prostate).
- 6. Urine culture may be indicated to detect occult infection in renal transplant recipients on immunosuppressive therapy.

Limitations

- 1. CPT 87086 may be used one time per encounter.
- 2. Colony count restrictions on coverage of CPT 87088 do not apply as they may be highly variable according to syndrome or other clinical circumstances (for example, antecedent therapy, collection time, and degree of hydration).
- 3. CPT 87088, 87184, and 87186 may be used multiple times in association with or independent of 87086, as urinary tract infections may be polymicrobial.
- 4. Testing for asymptomatic bacteriuria as part of a prenatal evaluation may be medically appropriate but is considered screening and therefore not covered by Medicare. The U.S. Preventive Services Task Force has concluded that screening for asymptomatic bacteriuria outside of the narrow indication for pregnant women is generally not indicated. There are insufficient data to recommend screening in ambulatory elderly patients including those with diabetes. Testing may be clinically indicated on other grounds including likelihood of recurrence or potential adverse effects of antibiotics, but is considered screening in the absence of clinical or laboratory evidence of infection.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Documentation Requirements

Appropriate HCPCS/CPT code(s) must be used as described.

Sources of Information

Bone, RC, RA Bal, FB Cerra, & ACCP/SCCM Consensus Conference Committee.1992. Definitions for sepsis & organ failure & guidelines for the use of innovative therapies in sepsis. Chest 101:1644-1655.

Clarridge, JE, JR Johnson, and MT Pezzlo. 1998 (in press). Cumitech 2B: Laboratory Diagnosis of Urinary Tract Infections. AS Weissfeld (coor. ed.); ASM Press, Washington, DC.

Kunin, CM. 1994. Urinary tract infections in females. Clin. Infect. Dis. 18:1-12.

NCD 190.12

*April 11 Changes – Red

Fu Associates, Ltd. 16 April 2011



Sodeman, TM. 1995. A practical strategy for diagnosis of urinary tract infections. Clin. Lab. Med. 15:235-250.

Stamm WE, and TM Hooton. 1993. Management of urinary tract infections in adults. N. Engl. J. Med. 329:1328-1334.

United States Preventive Services Task Force (1996). Guidelines for screening for asymptomatic bacteriuria.

Lachs MS, Nachamkin I, Edelstein PH et al. 1992. Spectrum bias in the evaluation of diagnostic tests: lessons from the rapid dipstick test for urinary tract infection. Ann. Int. Med. 117:135-140.



190.13 - Human Immunodeficiency Virus (HIV)Testing (Prognosis Including Monitoring)

Previously Listed as Edit 2

Other Names/Abbreviations

HIV-1 or HIV-2 quantification or viral load

Description

HIV quantification is achieved through the use of a number of different assays which measure the amount of circulating viral RNA. Assays vary both in methods used to detect viral RNA as well as in ability to detect viral levels at lower limits. However, all employ some type of nucleic acid amplification technique to enhance sensitivity, and results are expressed as the HIV copy number.

Quantification assays of HIV plasma RNA are used prognostically to assess relative risk for disease progression and predict time to death, as well as to assess efficacy of anti-retroviral therapies over time.

HIV quantification is often performed together with CD4+ T cell counts which provide information on extent of HIV induced immune system damage already incurred.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
87536	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, quantification
87539	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, quantification

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
042	Human immunodeficiency virus [HIV] disease
079.53	Human immunodeficiency virus, type 2 [HIV-2]
647.60-647.64	Other viral diseases complicating pregnancy (including HIV-I and II)
795.71	Nonspecific serologic evidence of human immunodeficiency virus [HIV
V08	Asymptomatic human immunodeficiency virus [HIV] infection status

Indications

1. A plasma HIV RNA baseline level may be medically necessary in any patient with confirmed HIV infection.

NCD 190.13



- 2. Regular periodic measurement of plasma HIV RNA levels may be medically necessary to determine risk for disease progression in an HIV-infected individual and to determine when to initiate anti-retroviral treatment regimens.
- 3. In clinical situations where risk of HIV infection is significant and initiation of therapy is anticipated, a baseline HIV quantification may be performed. These situations include:
 - a. Persistence of borderline or equivocal serologic reactivity in an at-risk individual.
 - b. Signs and symptoms of acute retroviral syndrome characterized by fever, malaise, lymphadenopathy and rash in an at-risk individual.

Limitations

- 1. Viral quantification may be appropriate for prognostic use including baseline determination, periodic monitoring, and monitoring of response to therapy. Use as a diagnostic test method is not indicated.
- 2. Measurement of plasma HIV RNA levels should be performed at the time of establishment of an HIV infection diagnosis. For an accurate baseline, 2 specimens in a 2-week period are appropriate.
- 3. For prognosis including anti-retroviral therapy monitoring, regular, periodic measurements are appropriate. The frequency of viral load testing should be consistent with the most current Centers for Disease Control and Prevention guidelines for use of anti-retroviral agents in adults and adolescents or pediatrics.
- 4. Because differences in absolute HIV copy number are known to occur using different assays, plasma HIV RNA levels should be measured by the same analytical method. A change in assay method may necessitate re-establishment of a baseline.
- 5. Nucleic acid quantification techniques are representative of rapidly emerging & evolving new technologies. Users advised to remain current on FDA-approval status.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Other Comments

Assessment of CD4+ T cell numbers is frequently performed in conjunction with viral load determination. When used in concert, the accuracy with which the risk for disease progression and death can be predicted is enhanced.

Sources of Information

CDC.1998. Guidelines for the use of antiretroviral agents in HIV-infected adults and adolescents. MMWR 47 (RR-5).

CDC.1998. Guidelines for use of antiretroviral agents in pediatric HIV infection. MMWR47 RR-4.

CDC.1998. Public Health Service Task Force recommendations for the use of anti-retroviral drugs in pregnant women infected with HIV-1 for maternal health and for reducing perinatal HIV-1 transmission in the United States. MMWR 47 (RR-2).

Carpenter, C.C., M.A. Fischi, S.M. Hammer, et . al. 1998. Antiretroviral therapy for HIV infection in 1998. Updated recommendations of international AIDS society-USA panel. A.M.A. 280:78-86.

Saag, M.S., M. Holodniy, D.R. Kuritzkes, et al. 1996. HIV viral load markers in clinical practice. Nature Medicine 2(6): 625-629.

NCD 190.13

*April 11 Changes – Red

Fu Associates, Ltd. 19 April 2011



190.14 - Human Immunodeficiency Virus (HIV) Testing (Diagnosis)

Previously Listed as Edit 3

Other Names/Abbreviations

HIV, HIV-1, HIV-2, HIV1/2, HTLV III, Human T-cell lymphotropic virus, AIDS, Acquired immune deficiency syndrome

Description

Diagnosis of Human Immunodeficiency Virus (HIV) infection is primarily made through the use of serologic assays. These assays take one of two forms: antibody detection assays and specific HIV antigen (p24) procedures. The antibody assays are usually enzyme immunoassays (EIA) which are used to confirm exposure of an individual's immune system to specific viral antigens. These assays may be formatted to detect HIV-1, HIV-2, or HIV-1 and 2 simultaneously and to detect both IgM and IgG. When the initial EIA test is repeatedly positive or indeterminate, an alternative test is used to confirm the specificity of the antibodies to individual viral components. The most commonly used method is the Western Blot.

The HIV-1 core antigen (p24) test detects circulating viral antigen which may be found prior to the development of antibodies and may also be present in later stages of illness in the form of recurrent or persistent antigenemia. Its prognostic utility in HIV infection has been diminished as a result of development of sensitive viral RNA assays, and its primary use today is as a routine screening tool in potential blood donors.

In several unique situations, serologic testing alone may not reliably establish an HIV infection. This may occur because the antibody response (particularly the IgG response detected by Western Blot) has not yet developed (that is, acute retroviral syndrome), or is persistently equivocal because of inherent viral antigen variability. It is also an issue in perinatal HIV infection due to transplacental passage of maternal HIV antibody. In these situations, laboratory evidence of HIV in blood by culture, antigen assays, or proviral DNA or viral RNA assays, is required to establish a definitive determination of HIV infection.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
86689	Qualitative or semiquantitative immunoassays performed by multiple step methods; HTLV or HIV antibody, confirmatory test (for example, Western Blot)
86701	Antibody; HIV-1
86702	Antibody; HIV-2
86703	Antibody; HIV-1 and HIV-2, single assay
87390	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-1
87391	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple step method; HIV-2

NCD 190.14



Code	Description
87534	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, direct probe technique
87535	Infectious agent detection by nucleic acid (DNA or RNA); HIV-1, amplified probe technique
87537	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, direct probe technique
87538	Infectious agent detection by nucleic acid (DNA or RNA); HIV-2, amplified probe technique

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
003.1	Salmonella septicemia
007.2	Coccidiosis (Isoporiasis)
007.4	Cryptosporidiosis
007.8	Other specified protozoal intestinal diseases
010.00-010.96	Primary tuberculous infection
011.00-011.96	Pulmonary tuberculosis
012.00-012.86	Other respiratory tuberculosis
013.00-013.96	Tuberculosis of meninges+ and central nervous system
014.00-014.86	Tuberculosis of intestines, peritoneum and mesenteric glands
015.00-015.96	Tuberculosis of bones and joints
016.00-016.96	Tuberculosis of genitourinary system
017.00-017.96	Tuberculosis of other organs
018.00-018.96	Miliary tuberculosis
027.0	Listeriosis
031.0-031.9	Diseases due to other mycobacteria
038.2	Pneumococcal septicemia
038.43	Septicemia (Pseudomonas)
039.0-039.9	Actinomycotic infections (includes Nocardia)
041.7	Pseudomonas infection
042	HIV disease (Acute retroviral syndrome, AIDS-related complex)
046.3	Progressive multifocal leukoencephalopathy
049.0-049.9	Other non-arthropod-borne viral diseases of central nervous system
052.0-052.1, 052.2, 052.7- 052.8	Chickenpox (with complication)
053.0, 053.10-053.13,053.14, 053.19-053.22, 053.29, 053.71,053.79, 053.8, 053.9	Herpes zoster

NCD 190.14



Code	Description
054.0, 054.10-054.13, 054.19, 054.2, 054.3, 054.40-054.44, 054.49, 054.5, 054.6, 054.7-054.73, 054.74, 054.79, 054.8, 054.9	Herpes simplex
055.0-055.8	Measles (with complication)
070.20-070.23	Viral hepatitis B with hepatic coma
070.30-070.33	Viral hepatitis B without mention of hepatic coma
070.41	Acute hepatitis C with hepatic coma
070.42	Hepatitis delta without mention of active hepatitis B disease with hepatic coma
070.44	Chronic hepatitis C with hepatic coma
070.49	Other specified viral hepatitis with hepatic coma
070.51	Acute hepatitis C without mention of hepatic coma
070.52	Hepatitis delta without mention of active hepatitis B disease without hepatic coma
070.54	Chronic hepatitis C without hepatic coma
070.59	Other specified viral hepatitis without hepatic coma
070.6	Unspecified viral hepatitis with hepatic coma
070.70	Unspecified viral hepatitis C without hepatic coma
070.71	Unspecified viral hepatitis C with hepatic coma
070.9	Unspecified viral hepatitis without hepatic coma
078.0	Molluscum contagiosum
078.10 – 078.19	Viral warts
078.3	Cat-scratch disease
078.5	Cytomegaloviral disease
078.88	Other specified diseases due to Chlamydiae
079.50	Retrovirus unspecified
079.51	HTLV-I
079.52	HTLV-II
079.53	Human immunodeficiency virus, type 2
079.59	Other specified Retrovirus
079.83	Parvovirus B19
079.88	Other specified chlamydial infection
079.98	Unspecified chlamydial infection
085.0-085.9	Leishmaniasis
088.0	Bartonellosis
090.0-090.9	Congenital syphilis
091.0-091.9	Early syphilis symptomatic
092.0-092.9	Early syphilis, latent
093.0-093.9	Cardiovascular syphilis
094.0-094.9	Neurosyphilis

NCD 190.14



Code	Description
095.0-095.9	Other forms of late syphilis, with symptoms
096	Late syphilis, latent
097.0-097.9	Other and unspecified syphilis
098.0-098.89	Gonococcal infections
099.0	Chancroid
099.1	Lymphogranuloma venereum
099.2	Granuloma inguinale
099.3	Reiter's disease
099.40-099.49	Other nongonococcal urethritis
099.50-099.59	Other venereal diseases due to Chlamydia trachomatis
099.8	Other specified venereal diseases
099.9	Venereal disease, unspecified
110.1	Dermatophytosis of nail
111.0	Pityriasis versicolor
112.0-112.9	Candidiasis
114.0-114.9	Coccidioidomycosis
115.00-115.99	Histoplasmosis
116.0-116.2	Blastomycotic infection
117.3	Aspergillosis
117.5	Cryptococcosis
118	Opportunistic mycoses
127.2	Strongyloidiasis
130.0-130.9	Toxoplasmosis
131.01	Trichomonal vulvovaginitis
132.2	Phthirus pubis
133.0	Scabies
136.21	Specific infection due to acanthamoeba
136.29	Other specific infections by free-living amebae
136.3	Pneumocystosis
136.8	Other specified infectious and parasitic disease (i.e.: microsporidiosis)
176.0-176.9	Kaposi's sarcoma
180.0-180.9	Malignant neoplasm of cervix uteri
200.20-200.28	Burkitt's tumor or lymphoma
200.80-200.88	Lymphosarcoma, other named variants
201.00-201.98	Hodgkin's disease
263.0	Malnutrition of moderate degree
263.1	Malnutrition of mild degree
263.9	Unspecified protein-calorie malnutrition
280.0-280.9	Iron deficiency anemias
285.9	Anemia, unspecified
287.30-287.39	Primary thrombocytopenia

NCD 190.14



Code	Description
288.00	Neutropenia, unspecified
288.01	Congenital neutropenia
288.02	Cyclic neutropenia
288.03	Drug induced neutropenia
288.04	Neutropenia due to infection
288.09	Other neutropenia
288.4	Hemophagocytic syndromes
288.50	Leukocytopenia, unspecified
288.51	Lymphocytopenia
288.59	Other decreased white blood cell count
288.60	Leukocytosis, unspecified
288.61	Lymphocytosis (symptomatic)
288.62	Leukemoid reaction
288.63	Monocytosis (symptomatic)
288.64	Plasmacytosis
288.65	Basophilia
288.66	Bandemia
288.69	Other elevated white blood cell count
288.8	Other specified disease of white blood cells
289.53	Neutropenic splenomegaly
294.8	Other persistent mental disorders due to conditions classified elsewhere
310.1	Personality change due to conditions classified elsewhere
322.2	Chronic meningitis
331.19	Other frontotemporal dementia
331.83	Mild cognitive impairment, so stated
336.9	Unspecified disease of spinal cord
348.30	Encephalopathy unspecified
348.39	Other encephalopathy
354.0-354.9	Mononeuritis of upper limbs and mononeuritis multiplex
356.8	Other specified idiopathic peripheral neuropathy
363.20	Chorioretinitis, unspecified
425.4	Other primary cardiomyopathies
473.0-473.9	Chronic sinusitis
481-482.41	Pneumococcal pneumonia and other bacterial pneumonia
482.42	Methicillin resistant pneumonia due to Staphylococcus aureus
482.49-482.9	Other pneumonia due to Staphylococcus, specified and unspecified
484.1	Pneumonia in cytomegalic inclusion disease
486	Pneumonia, organism unspecified
512.8	Other spontaneous pneumothorax
516.8	Other specified alveolar and parietoalveolar pneumonopathies

NCD 190.14



Code	Description
528.2	Oral aphthae
528.6	Leukoplakia of oral mucosa
530.20-530.21	Ulcer of esophagus
530.85	Barrett's esophagus
583.9	Nephropathy with unspecified pathological lesion in kidney
588.81	Secondary hyperparathyroidism (of renal origin)
588.89	Other specified disorders resulting from impaired renal function
647.60-647.64	Other viral diseases complicating pregnancy (use for HIV I and II)
682.0-682.9	Other cellulitis and abscess
690.10-690.18	Seborrheic dermatitis
696.1	Other psoriasis
698.3	Lichenification and lichen simplex chronicus
704.8	Other specified diseases of hair and hair follicles
706.0-706.9	Diseases of sebaceous glands
780.60	Fever, unspecified
780.61	Fever presenting with conditions classified elsewhere
780.62	Postprocedural fever
780.63	Postvaccination fever
780.64	Chills (without fever)
780.65	Hypothermia not associated with low environmental temperature
780.66	Febrile nonhemolytic transfusion reaction
780.79	Other malaise and fatigue
783.21	Abnormal loss of weight
783.40	Lack of expected normal physiological development
785.6	Enlargement of lymph nodes
786.00	Respiratory abnormality, unspecified
786.05	Shortness of breath
786.2	Cough
786.30	Hemoptysis, unspecified
786.31	Acute idiopathic pulmonary hemorrhage in infants (AIPHI)
786.39	Other hemoptysis
786.4	Abnormal sputum
787.91	Diarrhea
795.71	Nonspecific serologic evidence of human immunodeficiency virus
799.4	Wasting disease
V01.71	Contact or exposure to varicella
V01.79	Contact or exposure to other viral diseases
V71.5	Rape

NCD 190.14



Indications

Diagnostic testing to establish HIV infection may be indicated when there is a strong clinical suspicion supported by one or more of the following clinical findings:

- 1. The patient has a documented, otherwise unexplained, AIDS-defining or AIDS-associated opportunistic infection.
- 2. The patient has another documented sexually transmitted disease which identifies significant risk of exposure to HIV and the potential for an early or subclinical infection.
- 3. The patient has documented acute or chronic hepatitis B or C infection that identifies a significant risk of exposure to HIV and the potential for an early or subclinical infection.
- 4. The patient has a documented AIDS-defining or AIDS-associated neoplasm.
- 5. The patient has a documented AIDS-associated neurologic disorder or otherwise unexplained dementia.
- 6. The patient has another documented AIDS-defining clinical condition, or a history of other severe, recurrent, or persistent conditions which suggest an underlying immune deficiency (for example, cutaneous or mucosal disorders).
- 7. The patient has otherwise unexplained generalized signs and symptoms suggestive of a chronic process with an underlying immune deficiency (for example, fever, weight loss, malaise, fatigue, chronic diarrhea, failure to thrive, chronic cough, hemoptysis, shortness of breath, or lymphadenopathy).
- 8. The patient has otherwise unexplained laboratory evidence of a chronic disease process with an underlying immune deficiency (for example, anemia, leukopenia, pancytopenia, lymphopenia, or low CD4+ lymphocyte count).
- 9. The patient has signs and symptoms of acute retroviral syndrome with fever, malaise, lymphadenopathy, and skin rash.
- 10. The patient has documented exposure to blood or body fluids known to be capable of transmitting HIV (for example, needlesticks and other significant blood exposures) and antiviral therapy is initiated or anticipated to be initiated.
- 11. The patient is undergoing treatment for rape. (HIV testing is part of the rape treatment protocol.)

Limitations

- 1. HIV antibody testing in the United States is usually performed using HIV-1 or HIV-½ combination tests. HIV-2 testing is indicated if clinical circumstances suggest HIV-2 is likely (that is compatible clinical findings and HIV-1 test negative). HIV-2 testing may be indicated in areas of the country where there is greater prevalence of HIV-2 infections.
- 2. The Western Blot test should be performed only after documentation that the initial EIA tests are repeatedly positive or equivocal on a single sample.
- 3. The HIV antigen tests currently have no defined diagnostic usage.
- 4. Direct viral RNA detection may be performed in those situations where serologic testing does not establish a diagnosis but strong clinical suspicion persists (for example, acute retroviral syndrome, nonspecific serologic evidence of HIV, or perinatal HIV infection).
- 5. If initial serologic tests confirm an HIV infection, repeat testing is not indicated.

NCD 190.14



- 6. If initial serologic tests are HIV EIA negative and there is no indication for confirmation of infection by viral RNA detection, the interval prior to retesting is 3-6 months.
- 7. Testing for evidence of HIV infection using serologic methods may be medically appropriate in situations where there is a risk of exposure to HIV. However, in the absence of a documented AIDS defining or HIV-associated disease, an HIV-associated sign or symptom, or documented exposure to a known HIV-infected source, the testing is considered by Medicare to be screening and thus is not covered by Medicare (for example, history of multiple blood component transfusions, exposure to blood or body fluids not resulting in consideration of therapy, history of transplant, history of illicit drug use, multiple sexual partners, same-sex encounters, prostitution, or contact with prostitutes).
- 8. The CPT Editorial Panel has issued a number of codes for infectious agent detection by direct antigen or nucleic acid probe techniques that have not yet been developed or are only being used on an investigational basis. Laboratory providers are advised to remain current on FDA-approval status for these tests.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Documentation Requirements

Appropriate HCPCS/CPT code (s) must be used as described.

Sources of Information

CDC, 1993. Revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. MMWR 41 (No. RR17).

CDC, 1994. Revised classification system for human immunodeficiency virus infection in children less than 13 years of age.

CDC, 1998. Guidelines for treatment of sexually transmitted diseases. MMWR 47 (RR1):11-17.

Piatak, M., M.S. Saag, L.C. Yang, et al. 1993. High levels of HIV-1 in plasma during all stages of infection determined by competitive PCR. Science 259:1749-1754.

Rhame, R.S. 1994. Acquired immunodeficiency syndrome, p. 628-652. In Infectious Diseases; P.D. Hoeprich, M.C. Jordan, and A.R. Ronald (J.B. Lippincott Co., Philadelphia).

Vasudevachari, M.D., R.T. Davey, Jr., J.A. Metcalf, and H.C. Lane. 1997. Principles and procedures of human immunodeficiency virus serodiagnosis. In Manual of Clinical Laboratory Immunology (Fifth ed.); N.R. Rose, E.C. de Macario, J.D. Folds, H.C. Lane, and R.M. Nakamura (ASM Press, Washington, DC).

NCD 190.14



190.15 - **Blood Counts**

Previously Listed as Edit 4 Other Names/Abbreviations CBC

Description

Blood counts are used to evaluate and diagnose diseases relating to abnormalities of the blood or bone marrow. These include primary disorders such as anemia, leukemia, polycythemia, thrombocytosis and thrombocytopenia. Many other conditions secondarily affect the blood or bone marrow, including reaction to inflammation and infections, coagulopathies, neoplasms and exposure to toxic substances. Many treatments and therapies affect the blood or bone marrow, and blood counts may be used to monitor treatment effects.

The complete blood count (CBC) includes a hemogram and differential white blood count (WBC). The hemogram includes enumeration of red blood cells, white blood cells, and platelets, as well as the determination of hemoglobin, hematocrit, and indices.

The symptoms of hematological disorders are often nonspecific, and are commonly encountered in patients who may or may not prove to have a disorder of the blood or bone marrow. Furthermore, many medical conditions that are not primarily due to abnormalities of blood or bone marrow may have hematological manifestations that result from the disease or its treatment. As a result, the CBC is one of the most commonly indicated laboratory tests.

In patients with possible hematological abnormalities, it may be necessary to determine the hemoglobin and hematocrit, to calculate the red cell indices, and to measure the concentration of white blood cells and platelets. These measurements are usually performed on a multichannel analyzer that measures all of the parameters on every sample. Therefore, laboratory assessments routinely include these measurements.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
85004	Blood count, automated differential white blood cell (WBC) count
85007	Blood count; blood smear, microscopic examination with manual differential WBC count
85008	Blood count; blood smear, microscopic examination without manual differential WBC count
85013	Blood count, Spun microhematocrit
85014	Blood count, hematocrit (Hct)
85018	Blood count, Hemoglobin
85025	Blood count, complete (CBC), automated (Hgb, Hct, RBC, WBC and platelet count) and automated differential WBC count
85027	Blood count, complete (CBC), automated (Hgb, Hct, RBC, WBC and platelet count)
85032	Blood count; manual cell count (erythrocyte, leukocyte, platelet) each
85048	Blood count, leukocyte (WBC), automated

NCD 190.15



Code	Description
85049	Blood count; platelet, automated

ICD-9-CM Codes Covered by Medicare Program

Any ICD-9-CM code not listed in either the non-covered section or the medical necessity section.

Indications

Indications for a CBC or hemogram include red cell, platelet, and white cell disorders. Examples of these indications are enumerated individually below.

- Indications for a CBC generally include the evaluation of bone marrow dysfunction as a
 result of neoplasms, therapeutic agents, exposure to toxic substances, or pregnancy.
 The CBC is also useful in assessing peripheral destruction of blood cells, suspected
 bone marrow failure or bone marrow infiltrate, suspected myeloproliferative,
 myelodysplastic, or lymphoproliferative processes, and immune disorders.
- Indications for hemogram or CBC related to red cell (RBC) parameters of the hemogram include signs, symptoms, test results, illness, or disease that can be associated with anemia or other red blood cell disorder (e.g., pallor, weakness, fatigue, weight loss, bleeding, acute injury associated with blood loss or suspected blood loss, abnormal menstrual bleeding, hematuria, hematemesis, hematochezia, positive fecal occult blood test, malnutrition, vitamin deficiency, malabsorption, neuropathy, known malignancy, presence of acute or chronic disease that may have associated anemia. coagulation or hemostatic disorders, postural dizziness, syncope, abdominal pain, change in bowel habits, chronic marrow hypoplasia or decreased RBC production, tachycardia, systolic heart murmur, congestive heart failure, dyspnea, angina, nailbed arowth retardation. iaundice. hepatomegaly, splenomegaly. lymphadenopathy, ulcers on the lower extremities).
- 3. Indications for hemogram or CBC related to red cell (RBC) parameters of the hemogram include signs, symptoms, test results, illness, or disease that can be associated with polycythemia (for example, fever, chills, ruddy skin, conjunctival redness, cough, wheezing, cyanosis, clubbing of the fingers, orthopnea, heart murmur, headache, vague cognitive changes including memory changes, sleep apnea, weakness, pruritus, dizziness, excessive sweating, visual symptoms, weight loss, massive obesity, gastrointestinal bleeding, paresthesias, dyspnea, joint symptoms, epigastric distress, pain and erythema of the fingers or toes, venous or arterial thrombosis, thromboembolism, myocardial infarction, stroke, transient ischemic attacks, congenital heart disease, chronic obstructive pulmonary disease, increased erythropoietin production associated with neoplastic, renal or hepatic disorders, androgen or diuretic use, splenomegaly, hepatomegaly, diastolic hypertension.)
- 4. Specific indications for CBC with differential count related to the WBC include signs, symptoms, test results, illness, or disease associated with leukemia, infections or inflammatory processes, suspected bone marrow failure or bone marrow infiltrate, suspected myeloproliferative, myelodysplastic or lymphoproliferative disorder, use of drugs that may cause leukopenia, and immune disorders (e.g., fever, chills, sweats, shock, fatigue, malaise, tachycardia, tachypnea, heart murmur, seizures, alterations of

NCD 190.15



consciousness, meningismus, pain such as headache, abdominal pain, arthralgia, odynophagia, or dysuria, redness or swelling of skin, soft tissue bone, or joint, ulcers of the skin or mucous membranes, gangrene, mucous membrane discharge, bleeding, thrombosis, respiratory failure, pulmonary infiltrate, jaundice, diarrhea, vomiting, hepatomegaly, splenomegaly, lymphadenopathy, opportunistic infection, such as oral candidiasis.)

- 5. Specific indications for CBC related to the platelet count include signs, symptoms, test results, illness, or disease associated with increased or decreased platelet production and destruction, or platelet dysfunction (e.g., gastrointestinal bleeding, genitourinary tract bleeding, bilateral epistaxis, thrombosis, ecchymosis, purpura, jaundice, petechiae, fever, heparin therapy, suspected DIC, shock, pre-eclampsia, neonate with maternal ITP, massive transfusion, recent platelet transfusion, cardiopulmonary bypass, hemolytic uremic syndrome, renal diseases, lymphadenopathy, hepatomegaly, splenomegaly, hypersplenism, neurologic abnormalities, viral or other infection, myeloproliferative, myelodysplastic, or lymphoproliferative disorder, thrombosis, exposure to toxic agents, excessive alcohol ingestion, autoimmune disorder (SLE, RA).
- 6. Indications for hemogram or CBC related to red cell (RBC) parameters of the hemogram include, in addition to those already listed, thalassemia, suspected hemoglobinopathy, lead poisoning, arsenic poisoning, and spherocytosis.
- 7. Specific indications for CBC with differential count related to the WBC include, in addition to those already listed, storage diseases; mucopolysaccharidoses, and use of drugs that cause leukocytosis such as G-CSF or CM-CSF.
- 8. Specific indications for CBC related to platelet count include, in addition to those already listed, May-Hegglin syndrome and Wiskott-Aldrich syndrome.

Limitations

- 1. Testing of patients who are asymptomatic, or who do not have a condition that could be expected to result in a hematological abnormality, is screening and is not a covered service.
- 2. In some circumstances it may be appropriate to perform only a hemoglobin or hematocrit to assess the oxygen carrying capacity of the blood. When the ordering provider requests only a hemoglobin or hematocrit, the remaining components of the CBC are not covered.
- 3. When a blood count is performed for an end-stage renal disease (ESRD) patient, and is billed outside the ESRD rate, documentation of the medical necessity for the blood count must be submitted with the claim.
- 4. In some patients presenting with certain signs, symptoms or diseases, a single CBC may be appropriate. Repeat testing may not be indicated unless abnormal results are found, or unless there is a change in clinical condition. If repeat testing is performed, a more descriptive diagnosis code (e.g., anemia) should be reported to support medical necessity. However, repeat testing may be indicated where results are normal in patients with conditions where there is a continued risk for the development of hematologic abnormality.

NCD 190.15

Fu Associates, Ltd. 30 April 2011



ICD-9-CM Codes That Do Not Support Medical Necessity

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
078.10 – 078.19	Viral warts
210.0-210.9	Benign neoplasm of lip, oral cavity, and pharynx
214.0	Lipoma, skin and subcutaneous tissue of face
216.0-216.9	Benign neoplasm of skin
217	Benign neoplasm of breast
222.0-222.9	Benign neoplasm of male genital organs
224.0	Benign neoplasm of eyeball, except conjunctiva, cornea, retina, and choroid
230.0	Carcinoma in situ of lip, oral cavity and pharynx
232.0-232.9	Carcinoma in situ of skin
300.00-300.09	Neurotic disorders
301.0-301.9	Personality disorders
302.0-302.9	Sexual and gender identity disorders
307.0	Stuttering
307.20-307.23	Tics
307.3	Stereotypic movement disorder
307.80-307.89	Pain disorders related to psychological factors
312.00-312.9	Disturbance of conduct, not elsewhere classified
313.0-313.9	Disturbance of emotions specific to childhood and adolescence
314.00-314.9	Hyperkinetic syndrome of childhood
338.0	Central pain syndrome
338.11	Acute pain due to trauma
338.12	Acute post-thoracotomy pain
338.18	Other acute postoperative pain
338.19	Other acute pain
338.21	Chronic pain due to trauma
338.22	Chronic post-thoracotomy pain
338.28	Other chronic postoperative pain
338.29	Other chronic pain
338.4	Chronic pain syndrome
363.30-363.35	Charidal degeneration
363.40-363.43	Choroidal degeneration
363.50-363.57	Hereditary choroidal dystrophies
363.70-363.9	Choroidal detachment
366.00-366.9	Cataract
367.0-367.9	Disorders of refraction and accommodation
371.00-371.9	Corneal opacity and other disorders of cornea
373.00-373.9	Inflammation of eyelids

NCD 190.15



Code	Description
375.00-375.9	Disorders of lacrimal system
376.21-376.9	Disorders of the orbit, except 376.3 Other exophthalmic conditions
377.10-377.16	Optic atrophy
377.21-377.24	Other disorders of optic disc
384.20-384.25	Perforation of tympanic membrane
384.81-384.82	Other specified disorders of tympanic membrane
385.00-385.9	Other disorders of middle ear and mastoid
387.0-387.9	Otosclerosis
388.00-388.32	Degenerative and vascular disorders of ear; noise effects on inner ear; sudden hearing loss, unspecified; and tinnitus
388.40-388.45	Other abnormal auditory perception
388.5	Disorders of acoustic nerve
389.00-389.06, 389.08	Conductive hearing loss
389.10-389.18	Sensorineural hearing loss
389.20-389.22	Mixed hearing loss
389.7	Deaf, non-speaking, not elsewhere classifiable
389.8, 389.9	Hearing loss
440.0-440.1	Atherosclerosis of aorta and renal artery
443.81-443.9	Other and unspecified peripheral vascular disease
448.1	Capillary nevus, non neoplastic
457.0	Postmastectomy lymphedema syndrome
470	Deviated nasal septum
471.0-471.9	Nasal polyps
478.0	Hypertrophy of nasal turbinates
478.11	Nasal mucositis (ulcerative)
478.19	Other disease of nasal cavity and sinuses
478.4	Polyp of vocal cord or larynx
520.0-520.9	Disorders of tooth development and eruption
521.00-521.15, 521.20- 521.25, 521.30-521.35, 521.40-521.42,521.49, 521.5- 521.7, 521.81, 521.89, 521.9	Diseases of hard tissues of teeth
524.00-524.9	Dentofacial anomalies, including malocclusion
525.0, 525.10-525.13, 525.19, 525.20-525.26, 525.3, 525.40-525.44, 525.50-525.54, 525.60- 525.67, 525.69	Other diseases and conditions of teeth and supporting structures
525.71	Osseointegration failure of dental implant
525.72	Post-osseointegration biological failure of dental implant
525.73	Post-osseointegration mechanic failure of dental implant
525.8	Other specified disorders of the teeth and supporting structures

NCD 190.15



Code	Description
525.9	Unspecified disorder of the teeth and supporting structures
526.0-526.3	Diseases of the jaws
526.61	Perforation of root canal space
526.62	Endodontic overfill
526.63	Endodontic underfill
526.69	Other periradicular pathology associated with previous endodontic treatment
527.6-527.9	Diseases of salivary glands
575.6	Cholesterolosis of gallbladder
600.00-600.91	Hyperplasia of prostate
603.0	Encysted hydrocele
603.8	Other specified types of hydrocele
603.9	Hydrocele, unspecified
605	Redundant prepuce and phimosis
606.0-606.1	Infertility, male azoospermia and oligospermia
608.1	Spermatocele
608.20	Torsion of testis, unspecified
608.21	Extravaginal torsion of spermatic cord
608.22	Intravaginal torsion of spermatic cord
608.23	Torsion of appendix testis
608.24	Torsion of appendix epididymis
608.3	Atrophy of testis
610.0-610.9	Benign mammary dysplasia
611.1-611.6	Other disorders of breast
611.9	Unspecified breast disorder
616.2	Cyst of Bartholin's gland
618.00-618.05, 618.09, 618.1-618.7, 618.81-618.83, 618.84, 618.89, 618.9	Genital prolapse
620.0-620.3	Noninflammatory disorders of ovary, fallopian tube, & broad ligament
621.6-621.7	Malposition or chronic inversion of uterus
627.2-627.9	Menopausal and post menopausal disorders
628.0-628.9	Infertility, female
676.00-676.94	Other disorders of breast associated with childbirth and disorders of lactation
691.0-691.8	Atopic dermatitis and related disorders
692.0-692.9	Contact dermatitis and other eczema
700	Corns and callosities
701.0-701.9	Other hypertrophic and atrophic conditions of skin
702.0-702.8	Other dermatoses
703.9	Unspecified disease of nail

NCD 190.15



Code	Description
706.0-706.9	Diseases of sebaceous glands
709.00-709.4	Other disorders of skin and subcutaneous tissue
715.00-715.98	Osteoarthrosis
716.00-716.99	Other and unspecified arthropathies
718.00-718.99	Other derangement of joint
726.0-726.91	Peripheral enthesopathies and allied syndromes
727.00-727.9	Other disorders of synovium, tendon, and bursa
728.10-728.85	Disorders of muscle ligament and fascia
732.0-732.9	Osteochondropathies
733.00-733.09	Osteoporosis
734	Flat foot
735.0-735.9	Acquired deformities of toe
736.00-736.9	Other acquired deformities of limb
737.0-737.9	Curvature of spine
738.0-738.9	Other acquired deformity
739.0-739.9	Nonallopathic lesions, not elsewhere classified
799.81	Decreased libido
830.0-832.19	Dislocation of jaw, shoulder, and elbow
832.2	Nursemaid's elbow
833.00-833.19	Dislocation of wrist
834.00-834.12	Dislocation of finger
835.00-835.13	Dislocation of hip
836.0-836.69	Dislocation of knee
837.0-837.1	Dislocation of ankle
838.00-838.19	Dislocation of foot
839.00-839.9	Other, multiple and ill-defined dislocations
840.0-848.9	Sprains and strains of joints and adjacent muscles
905.0-909.9	Late effects of musculoskeletal and connective tissue injuries
910.0-919.9	Superficial injuries
930.0-932	Foreign body on external eye, in ear, in nose
955.0-957.9	Injury to peripheral nerve
V03.0-V06.9	Need for prophylactic vaccination
V11.0-V11.3	Personal history of mental disorder; schizophrenia, affective disorders, neurosis, and alcoholism
V11.4	Personal history of combat and operational stress reaction
V11.8-V11.9	Personal history of other and unspecified mental disorders
V14.0-V14.8	Personal history of allergy to medicinal agents
V16.0	Family history of malignant neoplasm, gastrointestinal tract
V16.3	Family history of malignant neoplasm, breast
V21.0-V21.9	Constitutional states in development

NCD 190.15



Code	Description
V25.01-V25.04, V25.09	Encounter for contraceptive management; general counseling and advice
V25.11	Encounter for insertion of intrauterine contraceptive device
V25.12	Encounter for removal of intrauterine contraceptive device
V25.13	Encounter for removal and reinsertion of intrauterine contraceptive device
V25.2-V25.3, V25.40-V25.43, V25.49, V25.5, V25.8, V25.9	Encounter for sterilization; menstrual extraction; surveillance of previously prescribed contraceptive methods; and insertion of implantable subdermal contraceptive; other specified and unspecified contraceptive management
V26.0-V26.39	Procreative management
V26.41	Other procreative counseling and advice using natural family planning
V26.42	Encounter for fertility preservation counseling
V26.49	Other procreative management, counseling and advice
V26.51	Tubal ligation status
V26.52	Vascectomy status
V26.81	Encounter for assisted reproductive fertility procedure cycle
V26.82	Encounter for fertility preservation procedure
V26.89-V26.9	Other specified and unspecified procreative management
V40.0-V40.9	Mental and behavioral problems
V41.0-V41.9	Problems with special senses and other special functions
V43.0-V43.1	Organ or tissue replaced by other means, eye globe or lens
V44.0-V44.9	Artificial opening status
V45.00-V45.02, V45.09	Other post surgical states
V45.11	Renal dialysis status
V45.12	Non-compliance with renal dialysis
V45.2-V45.4, V45.51, V45.52, V45.59, V45.61, V45.69, V45.71-V45.79, V45.81- V45.85, V45.86, V45.89	Other post surgical states
V48.0-V48.9	Problems with head, neck, and trunk
V49.0 - V49.85	Other conditions influencing health status
V49.86	Do not resuscitate status
*V49.87	*Physical restraints status
V49.89 - V49.9	Other specified and unspecified conditions influencing health status
V51.0	Encounter for breast reconstruction following mastectomy
V51.8	Other aftercare involving the use of plastic surgery
V52.0-V52.9	Fitting and adjustment of prosthetic device and implant
V53.01-V53.09	Fitting and adjustment of devices related to nervous system & special senses
V53.1	Fitting and adjustment of spectacles and contact lenses
V53.31-V53.39	Fitting and adjustment of cardiac device

NCD 190.15



Code	Description
V53.4	Fitting and adjustment of orthodontic devices
V53.50	Fitting and adjustment of intestinal appliance and device
V53.51	Fitting and adjustment of gastric lap band
V53.59	Fitting and adjustment of other gastrointestinal appliance and device
V53.6	Fitting and adjustment of urinary devices
V53.7	Fitting and adjustment of orthopedic devices
V53.8	Fitting and adjustment of wheelchair
V53.90-V53.99	Fitting and adjustment of other and unspecified device
V54.01-V54.9	Other orthopedic aftercare
V55.0-V55.9	Attention to artificial openings
V57.0-V57.2	Care involving use of rehabilitation procedures
V57.3	Care involving speech-language therapy
V57.4-V57.9	Orthoptic training, other specified, and unspecified rehabilitation procedure
V58.5	Orthodontics
V59.01-V59.9	Donors
V61.01	Family disruption due to family member on military deployment
V61.02	Family disruption due to return of family member from military deployment
V61.03	Family disruption due to divorce or legal separation
V61.04	Family disruption due to parent-child estrangement
V61.05	Family disruption due to child in welfare custody
V61.06	Family disruption due to child in foster care or in care of non-parental family member
V61.07	Family disruption due to death of family member
V61.08	Family disruption due to other extended absence of family member
V61.09	Other family disruption
V61.10	Counseling for marital and partner problems, unspecified
V61.11	Counseling for victim of spousal and partner abuse
V61.12	Counseling for perpetrator of spousal and partner abuse
V61.20	Counseling for parent-child problem
V61.21	Counseling for victim of child abuse
V61.22	Counseling for perpetrator of parental child abuse
V61.23	Counseling for parent-biological child problem
V61.24	Counseling for parent-adopted child problem
V61.25	Counseling for parent (guardian)-foster child problem
V61.29	Other parent-child problems
V61.3	Problems with aged parents or in-laws
V61.41	Alcoholism in family
V61.42	Substance abuse in family
V61.49, V61.5-V61.9	Other specified and unspecified family problems

NCD 190.15



Code	Description
V62.21	Personal current military deployment status
V62.22	Personal history of return from military deployment
V62.29	Other occupational circumstances or maladjustment
V62.3-V62.84	Educational circumstances; other psychological or physical stress, not elsewhere classified; suicidal ideation
V62.85	Homicidal ideation
V62.89-V62.9	Other psychological or physical stress, not elsewhere classified; and unspecified psychosocial circumstances
V65.2	Person feigning illness
V65.3	Dietary surveillance and counseling
V65.40-V65.49	Other counseling, not elsewhere classified
V65.5	Person with feared complaint in whom no diagnosis was made
V65.8	Other reasons for seeking consultation
V65.9	Unspecified reason for consultation
V66.0-V66.9	Convalescence and palliative care
V67.3	Follow-up examination following psychotherapy
V67.4	Follow-up examination following treatment of healed fracture
V69.3	Problems related to lifestyle, gambling and betting
V71.01 - V71.09	Observation and evaluation for suspected conditions not found, mental
V72.0	Examination of eyes and vision
V72.11 - V72.12; V72.19	Encounter for hearing conservation and treatment; other examination of ears and hearing
V72.2	Dental examination
V72.40, V72.41, V72.42	Pregnancy examination or test; pregnancy unconfirmed; negative result; positive result.
V72.5	Radiological examination, not elsewhere classified
V72.60	Laboratory examination, unspecified
V72.61	Antibody response examination
V72.62	Laboratory examination ordered as part of a routine general medical examination
V72.63	Pre-procedural laboratory examination
V72.69	Other laboratory examination
V72.7	Diagnostic skin and sensitization tests
V72.9	Unspecified examination
V76.10-V76.19	Special screening for malignant neoplasms, breast
V76.2	Special screening for malignant neoplasms, cervix
V76.44	Special screening for malignant neoplasms, other sites, prostate
V76.51	Special screening for malignant neoplasms, Intestine, colon
V77.1	Special screening for diabetes mellitus
V81.0-V81.2	Special screening for cardiovascular diseases

NCD 190.15



Documentation Required

Appropriate HCPCS/CPT code (s) must be used as described.

Sources of Information

Wintrobe's Clinical Hematology, G. Richard Lee et al editors, Lea & Febiger, 9th edition, Philadelphia PA 1993.

Hematology, Clinical and Laboratory Practice, R. Bick et al editors, Mosby-Year Book, Inc., St. Louis, Missouri, 1993.

"The Polycythemias", V.C. Broudy, Medicine, Chapter 5.V. Scientific American, NY, NY 1996. Laboratory Test Handbook, D.S. Jacobs et al, Lexi-Comp Inc, 4th edition, Cleveland OH 1996. Cancer: Principles & Practice of Oncology, DeVita, et al., 5th ed., Phil: Lippincott-Raven, 1997. Cecil Textbook of Medicine, Bennett, et al., 20th edition, Philadelphia: W.B. Saunders, 1996. Williams Hematology, Beutler, et al., 5th edition, New York: McGraw-Hill, 1995.



190.16 - Partial Thromboplastin Time (PTT)

Previously Listed as Edit 5

Other Names/Abbreviations

PTT

Description

Basic plasma coagulation function is readily assessed with a few simple laboratory tests: The Partial Thromboplastin Time (PTT), Prothrombin Time (PT), Thrombin Time (TT), or a quantitative fibrinogen determination. The PTT test is an in vitro laboratory test used to assess the intrinsic coagulation pathway and monitor heparin therapy.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
85730	Thromboplastin time, partial (PTT); plasma or whole blood

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
002.0-002.9	Typhoid and paratyphoid
003.0-003.9	Other Salmonella infections
038.9	Unspecified Septicemia
042	Human immunodeficiency virus (HIV) disease
060.0-060.9	Yellow fever
065.0-065.9	Arthropod borne hemorrhagic fever
070.0-070.9	Viral hepatitis
075	Infectious mononucleosis
078.6	Hemorrhagic nephrosonephritis
078.7	Arenaviral hemorrhagic fever
120.0	Schistosomiasis haematobium
121.1	Clonorchiasis
121.3	Fascioliasis
124	Trichinosis
135	Sarcoidosis
155.0-155.2	Malignant neoplasm of liver and intrahepatic bile ducts
197.7	Malignant neoplasm of liver, specified as secondary
238.4	Polycythemia vera
238.71	Essential thrombocythemia
238.72	Low grade myelodysplastic syndrome lesions

NCD 190.16



Code	Description
238.73	High grade myelodysplastic syndrome lesions
238.74	Myelodysplastic syndrome with 5q deletion
238.75	Myelodysplastic syndrome, unspecified
238.76	Myelofibrosis with myeloid metaplasia
238.77	Post-transplant lymphoproliferative disorder (PTLD)
238.79	Other lymphatic and hematopoietic tissues
239.9	Neoplasm of unspecified nature, site unspecified
246.3	Hemorrhage and infarction of thyroid
249.40	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled
250.40-250.43	Diabetic with renal manifestations
269.0	Deficiency of Vitamin K
273.0-273.3, 273.8-273.9	Disorders of plasma protein metabolism
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
275.1	Disorders of copper metabolism
275.2	Disorders of magnesium metabolism
275.3	Disorders of phosphorus metabolism
275.40-275.49	Disorders of calcium metabolism
275.5	Hungry bone syndrome
275.8-275.9	Other specified disorders of mineral metabolism, and unspecified disorder of mineral metabolism
277.1	Disorders of porphyrin metabolism
277.30	Amyloidosis, unspecified
277.31	Familial Mediterranean fever
277.39	Other amyloidosis
285.1	Acute posthemorrhagic anemia
286.0	Congenital factor VIII disorder - Hemophilia A
286.1	Congenital factor IX disorder - Hemophilia B
286.2-286.3	Other congenital factor deficiencies
286.4	von Willebrand's disease
286.5	Hemorrhagic disorder due to intrinsic circulating anticoagulants
286.6	Defibrination syndrome
286.7	Acquired coagulation factor deficiency
286.9	Other and unspecified coagulation defects
287.0-287.39	Allergic purpura; qualitative platelet defects; other non-
	thrombocytopenic purpuras; primary thrombocytopenia
287.41	Posttransfusion purpura

NCD 190.16



Code	Description
287.49	Other secondary thrombocytopenia
287.5-287.9	Thrombocytopenia, unspecified; other specified and unspecified hemorrhagic conditions
289.0	Polycythemia, secondary
289.81	Primary hypercoagulable state
325	Phlebitis and thrombophlebitis of intracranial venous sinuses
360.43	Hemophthalmos, except current injury
362.30-362.37	Retinal vascular occlusion
362.43	Hemorrhagic detachment of retinal pigment epithelium
362.81	Retinal hemorrhage
363.61-363.63	Choroidal hemorrhage
363.72	Choroidal detachment
368.9	Unspecified Visual Disturbances
372.72	Conjunctive hemorrhage
374.81	Hemorrhage of eyelid
376.32	Orbital hemorrhage
377.42	Hemorrhage in optic nerve sheaths
379.23	Vitreous hemorrhage
380.31	Hematoma of auricle or pinna
403.01, 403.11, 403.91	Hypertensive chronic kidney disease, with chronic kidney disease stage V or end stage renal disease
404.02, 404.12, 404.92	Hypertensive heart and chronic kidney disease, without heart failure and with chronic kidney disease stage V or end stage renal disease
410.00-410.92	Acute myocardial infarction
423.0	Hemopericardium
427.31	Atrial fibrillation
427.9	Cardiac dysrhythmias, unspecified
428.0	Congestive heart failure, unspecified
429.79	Mural thrombus
430-432.9	Cerebral hemorrhage
433.00-433.91	Occlusion and stenosis of precerebral arteries
434.00-434.91	Occlusion of cerebral arteries
435.9	Focal neurologic deficit
444.0-444.9	Arterial embolism and thrombosis
446.6	Thrombotic microangiopathy
447.2	Rupture of artery
448.0	Hereditary Hemorrhagic telangiectasia
451.0-451.9	Phlebitis and thrombophlebitis
453.0	Budd-Chiari syndrome
453.1	Thrombophlebitis migrans
453.2	Embolism and thrombosis of inferior vena cava

NCD 190.16



Code	Description
453.3	Embolism and thrombosis of renal vein
453.40	Acute venous embolism and thrombosis of unspecified deep vessels of lower extremity
453.41	Acute venous embolism and thrombosis of deep vessels of proximal lower extremity
453.42	Acute venous embolism and thrombosis of deep vessels of distal lower extremity
453.50	Chronic venous embolism and thrombosis of unspecified deep vessels of lower extremity
453.51	Chronic venous embolism and thrombosis of deep vessels of proximal lower extremity
453.52	Chronic venous embolism and thrombosis of deep vessels of distal lower extremity
453.6	Venous embolism and thrombosis of superficial vessels of lower extremity
453.71	Chronic venous embolism and thrombosis of superficial veins of upper extremity
453.72	Chronic venous embolism and thrombosis of deep veins of upper extremity
453.73	Chronic venous embolism and thrombosis of upper extremity, unspecified
453.74	Chronic venous embolism and thrombosis of axillary veins
453.75	Chronic venous embolism and thrombosis of subclavian veins
453.76	Chronic venous embolism and thrombosis of internal jugular veins
453.77	Chronic venous embolism and thrombosis of other thoracic veins
453.79	Chronic venous embolism and thrombosis of other specified veins
453.81	Acute venous embolism and thrombosis of superficial veins of upper extremity
453.82	Acute venous embolism and thrombosis of deep veins of upper extremity
453.83	Acute venous embolism and thrombosis of upper extremity, unspecified
453.84	Acute venous embolism and thrombosis of axillary veins
453.85	Acute venous embolism and thrombosis of subclavian veins
453.86 453.87	Acute venous embolism and thrombosis of internal jugular veins Acute venous embolism and thrombosis of other thoracic veins
	Acute venous embolism and thrombosis of other thoracic vents
453.89	'
453.9	Other venous embolism and thrombosis of unspecified site
456.0	Esophageal varices with bleeding
456.1	Esophageal varices without bleeding
456.8	Varices of other sites
459.89	Ecchymosis
530.7	Gastroesophageal laceration – hemorrhage syndrome
530.82	Esophageal hemorrhage

NCD 190.16



Code	Description
531.00-535.61	Gastric-Duodenal ulcer disease
535.70	Eosinophilic gastritis, without mention of obstruction
535.71	Eosinophilic gastritis, with obstruction
537.83	Angiodysplasia of stomach and duodenum with hemorrhage
537.84	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
556.0-557.9	Hemorrhagic bowel disease
562.02-562.03	Diverticulosis of small intestine with hemorrhage
562.12	Diverticulosis of colon with hemorrhage
562.13	Diverticulitis of colon with hemorrhage
568.81	Hemoperitoneum (nontraumatic)
569.3	Hemorrhage of rectum and anus
570	Acute and subacute necrosis of liver
571.0 – 571.9	Chronic liver disease and cirrhosis
572.0	Abscess of liver
572.1	Portal pyemia
572.2	Hepatic encephalopathy
572.3	Portal hypertension
572.4	Hepatorenal syndrome
572.8	Other sequelae of chronic liver disease
573.0 – 573.9	Other disorders of liver
576.0-576.9	Biliary tract disorders
577.0	Acute pancreatitis
578.0-578.9	Gastrointestinal Hemorrhage
579.0-579.9	Malabsorption
581.0-581.9	Nephrotic Syndrome
583.9	Nephritis, with unspecified pathological lesion in kidney
584.5	Acute kidney failure with lesion of tubular necrosis
584.6	Acute kidney failure with lesion of renal cortical necrosis
584.7	Acute kidney failure with lesion of renal medullary (papillary) necrosis
584.8	Acute kidney failure with other specified pathological lesion in kidney
584.9	Acute kidney failure, unspecified
585.4-585.9	Chronic kidney disease
586	Renal failure
593.81-593.89	Other disorders of kidney and ureter, with hemorrhage
596.7	Hemorrhage into bladder wall
596.8	Other disorders of bladder, with hemorrhage
599.70	Hematuria, unspecified
599.71	Gross hematuria
599.72	Microscopic hematuria
607.82	Penile hemorrhage
608.83	Vascular disorders of male genital organs

NCD 190.16



Code	Description
611.89	Other specified disorders of breast including hematoma
620.7	Hemorrhage of broad ligament
621.4	Hematometra
622.8	Other specified disorders of cervix, with hemorrhage
623.6	Vaginal hematoma
623.8	Other specified diseases of the vagina, with hemorrhage
624.5	Hematoma of vulva
626.6	Metrorrhagia
626.7	Postcoital bleeding
627.0	Premenopausal bleeding
627.1	Postmenopausal bleeding
629.0	Hematocele female not elsewhere classified
632	Missed abortion
634.00-634.92	Spontaneous abortion
635.10-635.12	Legally induced abortion, complicated by delayed or excessive hemorrhage
636.10-636.12	Illegally induced abortion, complicated by delayed or excessive hemorrhage
637.10-637.12	Abortion unspecified, complicated by delayed or excessive hemorrhage
638.1	Failed attempt abortion, complicated by delayed or excessive hemorrhage
639.1	Delayed or excessive hemorrhage following abortion and ectopic and molar pregnancies
639.6	Complications following abortion and ectopic and molar pregnancies, embolism
640.00-640.93	Hemorrhage in early pregnancy
641.00-641.93	Antepartum hemorrhage
642.00-642.94	Hypertension complicating pregnancy, childbirth, and the puerperium
646.70-646.73	Liver disorders in pregnancy
649.30	Coagulation defects complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable
649.31	Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition
649.32	Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication
649.33	Coagulation defects complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication
649.34	Coagulation defects complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication
649.50	Spotting complicating pregnancy, unspecified as to episode of care or not applicable

NCD 190.16



Code	Description
649.51	Spotting complicating pregnancy, delivered, with or without mention of antepartum condition
649.53	Spotting complicating pregnancy, antepartum condition or complication
656.00-656.03	Fetal maternal hemorrhage
658.40-658.43	Infection of amniotic cavity
666.00-666.34	Postpartum hemorrhage
671.20-671.54	Phlebitis in pregnancy
673.00-673.84	Obstetrical pulmonary embolus
674.30-674.34	Other complications of surgical wounds, with hemorrhage
710.0	Systemic Lupus erythematosus
713.2	Arthropathy associated with hematologic disorders (note: may not be used without indicating associated condition first)
713.6	Arthropathy associated with Henoch Schonlein (note: may not be used without indicating associated condition first)
719.10-719.19	Hemarthrosis
729.5	Pain in limb
729.81	Swelling of limb
733.10-733.19	Pathologic fracture associated with fat embolism
762.1	Other forms of placental separation with hemorrhage (affecting newborn code – do not assign to mother's record)
764.90-764.99	Fetal intrauterine growth retardation
767.0, 767.11	Subdural and cerebral hemorrhage
767.8	Other specified birth trauma, with hemorrhage
770.3	Fetal and newborn pulmonary hemorrhage
772.0	Fetal blood loss affecting newborn
772.10-772.14	Fetal and neonatal intraventricular hemorrhage
772.2	Fetal and neonatal subarachnoid hemorrhage
772.3	Fetal and neonatal umbilical hemorrhage after birth
772.4	Fetal and neonatal gastrointestinal hemorrhage
772.5	Fetal and neonatal adrenal hemorrhage
772.6 772.8	Fetal and neonatal cutaneous hemorrhage Fetal and neonatal other specified hemorrhage of fetus or newborn
772.9	Fetal and neonatal unspecified hemorrhage of newborn
774.0-774.7	Other perinatal jaundice
776.0	Hemorrhagic disease of the newborn
776.1	Transient neonatal thrombocytopenia
776.2	
	Disseminated intravascular coagulation in newborn
776.3	Other transient neonatal disorders of coagulation
776.4	Polycythemia neonatorum
776.5	Congenital anemia
776.6	Anemia of prematurity

NCD 190.16



Code	Description
776.7	Transient neonatal neutropenia
776.8	Other specified transient hematological disorders
776.9	Unspecified hematological disorder specific to newborn
780.2	Syncope
782.4	Jaundice, unspecified, not of newborn
782.7	Spontaneous ecchymoses Petechiae
784.7	Epistaxis
784.8	Hemorrhage from throat
785.4	Gangrene
785.50	Shock
786.05	Shortness of breath
786.30	Hemoptysis, unspecified
786.31	Acute idiopathic pulmonary hemorrhage in infants (AIPHI)
786.39	Other hemoptysis
786.50	Chest pain, unspecified
786.59	Chest pain
789.00-789.09	Abdominal pain
789.7	Colic
790.92	Abnormal coagulation profile
800.00-800.99	Fracture of vault of skull
801.00-801.99	Fracture of base of skull
802.20-802.9	Fracture of face bones
803.00-803.99	Other fracture, skull
804.00-804.99	Multiple fractures, skull
805.00- 806.9	Fracture, vertebral column
807.00-807.09	Fracture of rib(s), closed
807.10-807.19	Fracture of rib(s), open
808.8-808.9	Fracture of pelvis
809.0-809.1	Fracture of trunk
810.00-810.13	Fracture of clavicle
811.00-811.19	Fracture of scapula
812.00-812.59	Fracture of humerus
813.10-813.18	Fracture of radius and ulna, upper end, open
813.30-813.33	Fracture of radius and ulna, shaft, open
813.50-813.54	Fracture of radius and ulna, lower end, open
813.90-813.93	Fracture of radius and ulna, unspecified part, open
819.0-819.1	Multiple fractures
820.00-821.39	Femur
823.00-823.92	Tibia and fibula
827.0-829.1	Other multiple lower limb

NCD 190.16



Code	Description
852.00–853.19	Subarachnoid subdural, and extradural hemorrhage, following injury, Other and specified intracranial hemorrhage following injury
860.0-860.5	Traumatic pneumothorax and hemothorax
861.00-861.32	Injury to heart and lung
862.0-862.9	Injury to other and unspecified intrathoracic organs
863.0-863.99	Injury to gastrointestinal tract
864.00-864.19	Injury to liver
865.00-865.19	Injury to spleen
866.00-866.13	Injury to kidney
867.0-867.9	Injury to pelvic organs
868.00-868.19	Injury to other intra-abdominal organs
869.0-869.1	Internal injury to unspecified or ill defined organs
900.00-900.9	Injury to blood vessels of head and neck
901.0-901.9	Injury to blood vessels of the thorax
902.0-902.9	Injury to blood vessels of the abdomen and pelvis
903.00-903.9	Injury to blood vessels of upper extremity
904.0-904.9	Injury to blood vessels of lower extremity and unspecified sites
920-924.9	Contusion with intact skin surface
925.1-929.9	Crushing injury
958.2	Secondary and recurrent hemorrhage
959.9	Injury, unspecified site
964.2	Poisoning by anticoagulants
964.5	Poisoning by anticoagulant antagonists
964.7	Poisoning by natural blood and blood products
980.0	Toxic effects of alcohol
989.5	Snake venom
995.20	Unspecified adverse effect of unspecified drug, medicinal and biological substance
995.21	Arthus phenomenon
995.24	Failed moderate sedation during procedure
995.27	Other drug allergy
995.29	Unspecified adverse effect of other drug, medicinal and biological substance
996.70-996.79	Other complications of internal prosthetic device
997.02	latrogenic cerebrovascular infarction or hemorrhage
998.11	Hemorrhage or hematoma complicating a procedure
998.12	Hematoma complicating a procedure
999.2	Other vascular complications of medical care
V12.3	Personal history of diseases of blood and blood forming organs
V58.2	Admission for Transfusion of blood products
V58.61	Long term (current use) of anticoagulants

NCD 190.16



Code	Description
V58.83	Encounter for therapeutic drug monitoring

Indications

- 1. The PTT is most commonly used to quantitate the effect of therapeutic unfractionated heparin and to regulate its dosing. Except during transitions between heparin and warfarin therapy, in general both the PTT and PT are not necessary together to assess the effect of anticoagulation therapy. PT and PTT must be justified separately.
- 2. A PTT may be used to assess patients with signs or symptoms of hemorrhage or thrombosis. For example:
 - Abnormal bleeding, hemorrhage or hematoma petechiae or other signs of thrombocytopenia that could be due to Disseminated Intravascular Coagulation
 - Swollen extremity with or without prior trauma
- 3. A PTT may be useful in evaluating patients who have a history of a condition known to be associated with the risk of hemorrhage or thrombosis that is related to the intrinsic coagulation pathway. Such abnormalities may be genetic or acquired. For example:
 - Dysfibrinogenemia
 - Afibrinogenemia (complete)
 - Acute or chronic liver dysfunction or failure, including Wilson's disease
 - Hemophilia
 - Liver disease and failure
 - Infectious processes
 - Bleeding disorders
 - Disseminated intravascular coagulation
 - Lupus erythematosus or other conditions associated with circulating inhibitors, e.g., factor VIII Inhibitor, lupus-like anticoagulant
 - Sepsis
 - Von Willebrand's disease
 - Arterial and venous thrombosis, including the evaluation of hypercoagulable states
 - Clinical conditions associated with nephrosis or renal failure
 - Other acquired and congenital coagulopathies as well as thrombotic states
- 4. A PTT may be used to assess the risk of thrombosis or hemorrhage in patients who are going to have a medical intervention known to be associated with increased risk of bleeding or thrombosis. An example is as follows: evaluation prior to invasive procedures or operations of patients with personal or family history of bleeding or who are on heparin therapy

Limitations

1. The PTT is not useful in monitoring the effects of warfarin on a patient's coagulation routinely. However, a PTT may be ordered on a patient being treated with warfarin as

NCD 190.16



- heparin therapy is being discontinued. A PTT may also be indicated when the PT is markedly prolonged due to warfarin toxicity.
- 2. The need to repeat this test is determined by changes in the underlying medical condition and/or the dosing of heparin.
- 3. Testing prior to any medical intervention associated with a risk of bleeding and thrombosis (other than thrombolytic therapy) will generally be considered medically necessary only where there are signs or symptoms of a bleeding or thrombotic abnormality or a personal history of bleeding, thrombosis or a condition associated with a coagulopathy. Hospital/clinic-specific policies, protocols, etc., in and of themselves, cannot alone justify coverage.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM sections above.

Sources of Information

CMD Clinical Laboratory Workgroup

1999 CPT Physicians' Current Procedural Terminology, American Medical Association

Blue Book of Diagnostic Tests; PL Liu; Saunders

Wintrobe's Clinical Hematology; 9th Ed, 1993, Lea and Febiger

Harrison's Principles of Internal Medicine, 14th Ed., McGraw Hill, 1997.

Disorders of Hemostasis, Ratnoff, Oscar D. & Forbes, Charles D., W.B. Saunders Co., 1996

Hemostasis and Thrombosis: Basic Principles and Clinical Practice. <u>Colman</u>, et al editors, J.B. Lippincott, 3rd Edition, 1994, pp 896-898and 1045-1046.

"College of American Pathologists Conference XXXI on Laboratory Monitoring of Anticoagulant Therapy," Arch Pathol Lab Med, Vol 122, Sep 1998, P 782-798.

Lupus Anticoagulants/Antiphospholipid-protein Antibodies: The Great Imposters, Triplett DA, Lupus 1996:5:431



190.17 - Prothrombin Time (PT)

Previously Listed as Edit 6 Other Names/Abbreviations

PT

Description

Basic plasma coagulation function is readily assessed with a few simple laboratory tests: the Partial Thromboplastin Time (PTT), Prothrombin Time (PT), Thrombin Time (TT), or a quantitative fibrinogen determination. The PT test is one in-vitro laboratory test used to assess coagulation. While the PTT assesses the intrinsic limb of the coagulation system, the PT assesses the extrinsic or tissue factor dependent pathway. Both tests also evaluate the common coagulation pathway involving all the reactions that occur after the activation of factor X. Extrinsic pathway factors are produced in the liver and their production is dependent on adequate vitamin K activity. Deficiencies of factors may be related to decreased production or increased consumption of coagulation factors. The PT/INR is most commonly used to measure the effect of warfarin and regulate its dosing. Warfarin blocks the effect of vitamin K on hepatic production of extrinsic pathway factors.

A PT is expressed in seconds and/or as an international normalized ratio (INR). The INR is the PT ratio that would result if the WHO reference thromboplastin was used in performing the test.

Current medical information does not clarify the role of laboratory PT testing in patients who are self monitoring. Therefore, the indications for testing apply regardless of whether or not the patient is also PT self-testing.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
85610	Prothrombin Time

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
002.0-002.9	Typhoid and paratyphoid
003.0-003.9	Other Salmonella infections
038.9	Unspecified Septicemia
042	Human Immunodeficiency virus (HIV) disease
060.0-060.9	Yellow fever
065.0-065.9	Arthropod-borne hemorrhagic fever
070.0-070.9	Viral hepatitis
075	Infectious mononucleosis
078.6	Hemorrhagic nephrosonephritis

NCD 190.17



Code	Description
078.7	Arenaviral hemorrhagic fever
084.8	Blackwater fever
120.0	Schistosomiasis
121.1	Clonorchiasis
121.3	Fascioliasis
124	Trichinosis
134.2	Hirudiniasis
135	Sarcoidosis
152.0-152.9	Malignant neoplasm of small intestine, including duodenum
155.0-155.2	Malignant neoplasm of liver and intrahepatic bile ducts
156.0-156.9	Malignant neoplasm of gallbladder and extrahepatic bile ducts
157.0-157.9	Malignant neoplasm of pancreas
188.0-189.9	Malignant neoplasm of bladder, kidney, and other and unspecified urinary organs
197.7	Secondary malignant neoplasm, liver
198.0	Secondary malignant neoplasm, kidney
198.1	Secondary malignant neoplasm, other urinary organs
200.00-200.28	Lymphosarcoma and reticulosarcoma; Burkitt's tumor or lymphoma
200.30-200.38	Marginal zone lymphoma
200.40-200.48	Mantle cell lymphoma
200.50-200.58	Primary central nervous system lymphoma
200.60-200.68	Anaplastic large cell lymphoma
200.70-200.78	Large cell lymphoma
200.80-200.88	Malignant tumors of lymphatic tissue; other named variants
202.00-202.68	Other malignant neoplasms of lymphoid and histiocytic tissue
202.70-202.78	Peripheral T-cell lymphoma
202.80-202.98	Other lymphomas; other and unspecified malignant neoplasms of lymphoid and histiocytic tissue
209.20-209.27, 209.29	Malignant carcinoid tumors of other and unspecified sites
209.70	Secondary neuroendocrine tumor, unspecified site
209.71	Secondary neuroendocrine tumor of distant lymph nodes
209.72	Secondary neuroendocrine tumor of liver
209.73	Secondary neuroendocrine tumor of bone
209.74	Secondary neuroendocrine tumor of peritoneum
209.75	Secondary Merkel cell carcinoma
209.79	Secondary neuroendocrine tumor of other sites
223.0-223.9	Benign neoplasm of kidney and other urinary organs
238.4	Polycythemia vera
238.5	Histocytic and mast cells – neoplasm of uncertain behavior
238.6	Plasma cells – neoplasm of uncertain behavior
238.71	Essential thrombocythemia
238.72	Low grade myelodysplastic syndrome lesions

NCD 190.17



Code	Description
238.73	High grade myelodysplastic syndrome lesions
238.74	Myelodysplastic syndrome with 5q deletion
238.75	Myelodysplastic syndrome, unspecified
238.76	Myelofibrosis with myeloid metaplasia
238.77	Post-transplant lymphoproliferative disorder (PTLD)
238.79	Other lymphatic and hematopoietic tissues
239.4	Neoplasm of unspecified nature, bladder
239.5	Neoplasm of unspecified nature, other genitourinary organs
239.9	Neoplasm of unspecified nature, site unspecified
246.3	Hemorrhage and infarction of thyroid
249.40	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled
250.40-250.43	Diabetic with renal manifestations
263.0-263.9	Other and unspecified protein/calorie malnutrition
269.0	Deficiency of Vitamin K
269.2	Unspecified vitamin deficiency
273.0-273.3, 273.8-273.9	Disorders of plasma protein metabolism
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
277.1	Disorders of porphyrin metabolism
277.30	Amyloidosis, unspecified
277.31	Familial Mediterranean fever
277.39	Other amyloidosis
280.0	Iron deficiency anemia, secondary to blood loss - chronic
280.9	Iron deficiency anemia, unspecified
281.0	Pernicious anemia
281.1	Other vitamin B12 deficiency anemia, NEC
281.9	Unspecified deficiency anemia, NOS
285.0	Sideroblastic anemia
285.1	Acute posthemorrhagic anemia
286.0-286.9	Coagulation defects
287.0-287.39	Allergic purpura; qualitative platelet defects; other non-thrombocytopenic purpuras; primary thrombocytopenia
287.41	Posttransfusion purpura
287.49	Other secondary thrombocytopenia
287.5-287.9	Thrombocytopenia, unspecified; other specified and unspecified hemorrhagic conditions
289.81	Primary hypercoagulable state

NCD 190.17



Code	Description
290.40-290.43	Vascular dementia
325	Phlebitis and thrombophlebitis of intracranial venous sinuses
342.90-342.92	Hemiplegia NOS
360.43	Hemophthalmos, except current injury
362.18	Retinal vasculitis
362.30-362.37	Retinal vascular occlusion
362.43	Hemorrhagic detachment of retinal pigment epithelium
362.81	Retinal hemorrhage
363.61-363.72	Choroidal hemorrhage and rupture, detachment
368.9	Unspecified visual disturbances
372.72	Conjunctival hemorrhage
374.81	Hemorrhage of eyelid
376.32	Orbital hemorrhage
377.42	Hemorrhage in optic nerve sheaths
377.53	Disorders of optic chiasm associated with vascular disorders
377.62	Disorders of visual pathways associated with vascular disorders
377.72	Disorders of visual cortex associated with vascular disorders
379.23	Vitreous hemorrhage
380.31	Hematoma of auricle or pinna
386.2	Vertigo of central origin
386.50	Labyrinthine dysfunction, unspecified
394.0-394.9	Diseases of the mitral valve
395.0	Rheumatic aortic stenosis
395.2	Rheumatic aortic stenosis with insufficiency
396.0-396.9	Diseases of mitral and aortic valves
397.0-397.9	Diseases of other endocardial structures
398.0-398.99	Other rheumatic heart disease
403.01, 403.11, 403.91	Hypertensive chronic kidney disease, with chronic kidney disease stage V or end stage renal disease
404.02, 404.12, 404.92	Hypertensive heart and chronic kidney disease, without heart failure and with chronic kidney disease stage V or end stage renal disease
410.00-410.92	Acute myocardial infarction
411.1	Intermediate coronary syndrome
411.81	Coronary occlusion without myocardial infarction
411.89	Other acute and subacute forms of ischemic heart disease
413.0-413.9	Angina pectoris
414.00-414.07	Coronary atherosclerosis
414.3	Coronary atherosclerosis due to lipid rich plaque
414.8	Other specified forms of chronic ischemic heart disease
414.9	Chronic ischemic heart disease, unspecified
415.0 – 415.19	Acute pulmonary heart disease

NCD 190.17



Code	Description
416.9	Chronic pulmonary heart disease, unspecified
423.0	Hemopericardium
424.0	Mitral valve disorders
424.1	Aortic valve disorder
424.90	Endocarditis, valve unspecified, unspecified cause
425.0-425.9	Cardiomyopathy
427.0-427.9	Cardiac dysrhythmias
428.0-428.9	Heart failure
429.0-429.4	III-defined descriptions and complications of heart disease
429.79	Other sequelae of myocardial infarction, not elsewhere classified
430	Subarachnoid hemorrhage
431	Intracerebral hemorrhage
432.0-432.9	Other and unspecified intracranial hemorrhage
433.00-433.91	Occlusion and stenosis of precerebral arteries
434.00-434.91	Occlusion of cerebral arteries
435.0-435.9	Transient cerebral ischemia
436	Acute, but ill-defined cerebrovascular disease
437.0	Cerebral atherosclerosis
437.1	Other generalized ischemic cerebrovascular disease
437.6	Nonpyogenic thrombosis of intracranial venous sinus
440.0-440.32	Atherosclerosis of aorta; of other arteries; of bypass grafts
440.4	Chronic total occlusion of artery of the extremities
440.8-440.9	Atherosclerosis of other specified arteries; generalized and unspecified atherosclerosis
441.0-441.9	Aortic aneurysm and dissection
443.0-443.9	Other peripheral vascular disease
444.0-444.9	Arterial embolism and thrombosis
447.1	Stricture of artery
447.2	Rupture of artery
447.6	Arteritis, unspecified
448.0	Hereditary hemorrhagic telangiectasia
448.9	Other and unspecified capillary diseases
451.0-451.9	Phlebitis and thrombophlebitis
452	Portal vein thrombosis
453.0	Budd-Chiari syndrome
453.1	Thrombophlebitis migrans
453.2	Embolism and thrombosis of inferior vena cava
453.3	Embolism and thrombosis of renal vein
453.40	Acute venous embolism and thrombosis of unspecified deep vessels of lower extremity

NCD 190.17



Code	Description
453.41	Acute venous embolism and thrombosis of deep vessels of proximal lower extremity
453.42	Acute venous embolism and thrombosis of deep vessels of distal lower extremity
453.50	Chronic venous embolism and thrombosis of unspecified deep vessels of lower extremity
453.51	Chronic venous embolism and thrombosis of deep vessels of proximal lower extremity
453.52	Chronic venous embolism and thrombosis of deep vessels of distal lower extremity
453.6	Venous embolism and thrombosis of superficial vessels of lower extremity
453.71	Chronic venous embolism and thrombosis of superficial veins of upper extremity
453.72	Chronic venous embolism and thrombosis of deep veins of upper extremity
453.73	Chronic venous embolism and thrombosis of upper extremity, unspecified
453.74	Chronic venous embolism and thrombosis of axillary veins
453.75	Chronic venous embolism and thrombosis of subclavian veins
453.76	Chronic venous embolism and thrombosis of internal jugular veins
453.77	Chronic venous embolism and thrombosis of other thoracic veins
453.79	Chronic venous embolism and thrombosis of other specified veins
453.81	Acute venous embolism and thrombosis of superficial veins of upper extremity
453.82	Acute venous embolism and thrombosis of deep veins of upper extremity
453.83	Acute venous embolism and thrombosis of upper extremity, unspecified
453.84	Acute venous embolism and thrombosis of axillary veins
453.85	Acute venous embolism and thrombosis of subclavian veins
453.86 453.87	Acute venous embolism and thrombosis of internal jugular veins Acute venous embolism and thrombosis of other thoracic veins
453.89	Acute venous embolism and thrombosis of other thoracic veins Acute venous embolism and thrombosis of other specified veins
453.9	Other venous embolism and thrombosis of unspecified site
455.2	,
	Internal hemorrhoids with other complication
455.5	External hemorrhoids with other complication
455.8	Unspecified hemorrhoids with other complication
456.0-456.1	Esophageal varices
456.8	Varices of other sites
459.0	Hemorrhage, unspecified
459.10-459.19	Postphlebetic syndrome
459.2	Compression of vein
459.81	Venous (peripheral) insufficiency, unspecified

NCD 190.17



Code	Description
459.89	Other, other specified disorders of circulatory system
511.81	Malignant pleural effusion
511.89	Other specified forms of effusion, except tuberculosis
514	Pulmonary congestion and hypostasis
530.7	Gastroesophageal laceration - hemorrhage syndrome
530.82	Esophageal hemorrhage
530.86	Infection of esophagostomy
530.87	Mechanical complication of esophagostomy
531.00-535.61	Gastric ulcer, duodenal ulcer, peptic ulcer, gastrojejunal ulcer, gastritis and duodenitis
535.70	Eosinophilic gastritis, without mention of obstruction
535.71	Eosinophilic gastritis, with obstruction
555.0-555.9	Regional enteritis
556.0-556.9	Ulcerative colitis
557.0-557.9	Vascular insufficiency of intestine
562.02-562.03	Diverticulosis of small intestine with hemorrhage
562.10	Diverticulosis of colon w/o hemorrhage
562.11	Diverticulitis of colon w/o hemorrhage
562.12	Diverticulosis of colon with hemorrhage
562.13	Diverticulitis of colon with hemorrhage
568.81	Hemoperitoneum (nontraumatic)
569.3	Hemorrhage of rectum and anus
571.0-571.9	Chronic liver disease and cirrhosis
572.2	Hepatic encephalopathy
572.4	Hepatorenal syndrome
572.8	Other sequelae of chronic liver disease
573.1-573.9	Hepatitis in viral diseases, other and unspecified disorder of liver
576.0-576.9	Other disorders of Biliary tract
577.0	Acute pancreatitis
578.0-578.9	Gastrointestinal hemorrhage
579.0-579.9	Intestinal Malabsorption
581.0-581.9	Nephrotic Syndrome
583.9	Nephritis, with unspecified pathological lesion in kidney
584.5	Acute kidney failure with lesion of tubular necrosis
584.6	Acute kidney failure with lesion of renal cortical necrosis
584.7	Acute kidney failure with lesion of renal medullary (papillary) necrosis
584.8	Acute kidney failure with other specified pathological lesion in kidney
584.9	Acute kidney failure, unspecified
585.4-585.9	Chronic kidney disease
586	Renal failure, unspecified

NCD 190.17



Code	Description
593.81-593.89	Other specified disorders of kidney and ureter
596.7	Hemorrhage into bladder wall
596.8	Other specified disorders of bladder
599.70	Hematuria, unspecified
599.71	Gross hematuria
599.72	Microscopic hematuria
607.82	Vascular disorders of penis
608.83	Vascular disorders of male genital organs
611.89	Other specified disorders of breast including hematoma
620.7	Hematoma of broad ligament
621.4	Hematometra
622.8	Other specified noninflammatory disorders of cervix
623.6	Vaginal hematoma
623.8	Other specified noninflammatory disorders of the vagina
624.5	Hematoma of vulva
626.2-626.9	Abnormal bleeding from female genital tract
627.0	Premenopausal menorrhagia
627.1	Postmenopausal bleeding
629.0	Hematocele female, not classified elsewhere
632	Missed abortion
634.10-634.12	Spontaneous abortion, complicated by excessive hemorrhage
635.10-635.12	Legally induced abortion, complicated by delayed or excessive hemorrhage
636.10-636.12	Illegally induced abortion, complicated by delayed or excessive hemorrhage
637.10-637.12	Abortion unspecified, complicated by delayed or excessive hemorrhage
638.1	Failed attempted abortion, complicated by delayed or excessive hemorrhage
639.1	Delayed or excessive hemorrhage following abortion and ectopic and molar pregnancies
639.6	Complications following abortion and ectopic and molar pregnancies with embolism
640.00-640.93	Hemorrhage in early pregnancy
641.00-641.93	Antepartum hemorrhage, abruptio placentae, and placenta previa
642.00-642.94	Hypertension complicating pregnancy, childbirth, and the puerperium
646.70-646.73	Liver disorders in pregnancy
649.30	Coagulation defects complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable
649.31	Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition

NCD 190.17



Code	Description
649.32	Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication
649.33	Coagulation defects complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication
649.34	Coagulation defects complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication
649.50	Spotting complicating pregnancy, unspecified as to episode of care or not applicable
649.51	Spotting complicating pregnancy, delivered, with or without mention of antepartum condition
649.53	Spotting complicating pregnancy, antepartum condition or complication
656.00-656.03	Fetal maternal hemorrhage
658.40-658.43	Infection of amniotic cavity
666.00-666.34	Postpartum hemorrhage
671.20-671.94	Venous complications in pregnancy and the puerperium except legs, vulva and perineum
673.00-673.84	Obstetrical pulmonary embolism
674.30-674.34	Other complications of obstetrical surgical wounds
713.2	Arthropathy associated with hematological disorders
713.6	Arthropathy associated with hypersensitivity reaction
719.15	Hemarthrosis pelvic region and thigh
719.16	Lower leg
719.19	Multiple sites
729.5	Pain in limb
729.81	Swelling of limb
733.10	Pathologic fracture, unspecified site
746.00-746.9	Other Congenital anomalies of heart
762.1	Other forms of placental separation and hemorrhage
767.0, 767.11	Birth trauma, subdural and cerebral hemorrhage and injury to scalp
767.8	Other specified birth trauma
770.3	Pulmonary hemorrhage
772.0	Fetal blood loss affecting newborn
772.10-772.14	Fetal and neonatal intraventricular hemorrhage
772.2	Fetal and neonatal subarachnoid hemorrhage
772.3	Fetal and neonatal umbilical hemorrhage after birth
772.4	Fetal and neonatal gastrointestinal hemorrhage
772.5	Fetal and neonatal adrenal hemorrhage
772.6	Fetal and neonatal cutaneous hemorrhage
772.8	Fetal and neonatal other specified hemorrhage of fetus or newborn
772.9	Fetal and neonatal unspecified hemorrhage of newborn
774.6	Unspecified fetal and neonatal jaundice
776.0	Hemorrhagic disease of the newborn
776.1	Transient neonatal thrombocytopenia

NCD 190.17



Code	Description
776.2	Disseminated intravascular coagulation in newborn
776.3	Other transient neonatal disorders of coagulation
776.4	Polycythemia neonatorum
776.5	Congenital anemia
776.6	Anemia of prematurity
776.7	Transient neonatal neutropenia
776.8	Other specified transient hematological disorders
776.9	Unspecified hematological disorder specific to newborn
780.2	Syncope and collapse
782.3	Edema
782.4	Jaundice, unspecified, not of newborn
782.7	Spontaneous ecchymosis
784.7	Epistaxis
784.8	Hemorrhage from throat
785.4	Gangrene
785.50	Shock without mention of trauma
786.05	Shortness of breath
786.30	Hemoptysis, unspecified
786.31	Acute idiopathic pulmonary hemorrhage in infants (AIPHI)
786.39	Other hemoptysis
786.59	Chest pain, other
789.00-789.09	Abdominal pain
789.1	Hepatomegaly
789.51	Malignant ascites
789.59	Other ascites
789.7	Colic
790.92	Abnormal coagulation profile
790.94	Euthyroid sick syndrome
791.2	Hemoglobinuria
794.8	Abnormal Liver Function Study
800.00-800.99	Fracture of vault of skull
801.00-801.99	Fracture of base of skull
802.20-802.9	Fracture of face bones
803.00-803.99	Other and unqualified skull fractures
804.00-804.99	Multiple fractures involving skull or face with other bones
805.00-806.9	Fracture, vertebral column
807.00-807.09	Fractures of rib(s), closed
807.10-807.19	Fracture of rib(s), open
808.8-808.9	Unspecified fracture of pelvis
809.0-809.1	Ill-defined fractures of bones of trunk
810.00-810.13	Fracture of clavicle

NCD 190.17



Code	Description
811.00-811.19	Fracture of scapula
812.00-812.59	Fracture of humerus
813.10-813.18	Fracture of radius and ulna, upper end, open
813.30-813.33	Shaft, open
813.50-813.54	Lower end, open
813.90-813.93	Fracture unspecified part, open
819.0-819.1	Multiple fractures involving both upper limbs, closed and open
820.00-821.39	Fracture of neck of femur
823.00-823.92	Fracture of tibia and fibula
827.0-829.1	Other multiple lower limb
852.00-853.19	Subarachnoid subdural, and extradural hemorrhage, following injury, Other and specified intracranial hemorrhage following injury
860.0-860.5	Traumatic pneumothorax and hemothorax
861.00-861.32	Injury to heart and lung
862.0-862.9	Injury to other and unspecified intrathoracic organs
863.0-863.90	Injury to gastrointestinal tract
863.91-863.95, 863.99	Adding to Injury to gastrointestinal tract
864.00-864.19	Injury to liver
865.00-865.19	Injury to spleen
866.00-866.13	Injury to kidney
867.0-867.9	Injury to pelvic organs
868.00-868.19	Injury to other intra-abdominal organs
869.0-869.1	Internal injury to unspecified or ill defined organs
900.00-900.9	Injury to blood vessels of head and neck
901.0-901.9	Injury to blood vessels of the thorax
902.0-902.9	Injury to blood vessels of the abdomen and pelvis
903.00-903.9	Injury to blood vessels of upper extremity
904.0-904.9	Injury to blood vessels of lower extremity and unspecified sites
920-924.9	Contusion with intact skin surface
925.1-929.9	Crushing injury
958.2	Secondary and recurrent hemorrhage
959.9	Injury, unspecified site
964.0-964.9	Poisoning by agents primarily affecting blood constituents
980.0-980.9	Toxic effect of alcohol
981	Toxic effect of petroleum products
982.0-982.8	Toxic effects of solvents other than petroleum-based
987.0-987.9	Toxic effect of other gases, fumes or vapors
989.0-989.9	Toxic effect of other substances chiefly non-medicinal as to source
995.20	Unspecified adverse effect of unspecified drug, medicinal and biological substance
995.21	Arthus phenomenon

NCD 190.17



Code	Description
995.24	Failed moderate sedation during procedure
995.27	Other drug allergy
995.29	Unspecified adverse effect of other drug, medicinal & biological substance
996.82	Complication of transplanted liver
997.02	latrogenic cerebrovascular infarction or hemorrhage
997.4	Digestive system complications
998.11-998.12	Hemorrhage or hematoma complicating a procedure
999.2	Other vascular complications
999.80	Transfusion reaction, unspecified
999.83	Hemolytic transfusion reaction, incompatibility unspecified
999.84	Acute hemolytic transfusion reaction, incompatibility unspecified
999.85	Delayed hemolytic transfusion reaction, incompatibility unspecified
999.89	Other transfusion reaction
V08	Asymptomatic HIV infection
V12.1	History of nutritional deficiency
V12.3	Personal history of diseases of blood and blood-forming organs
V12.50-V12.54, V12.59	Personal history of transient ischemic attack and cerebral infarction without residual deficits
V15.1	Personal history of surgery to heart and great vessels
V15.21	Personal history of undergoing in utero procedure during pregnancy
V15.22	Personal history of undergoing in utero procedure while a fetus
V15.29	Surgery to other organs
V42.0	Kidney replaced by transplant
V42.1	Heart replaced by transplant
V42.2	Heart valve replaced by transplant
V42.6	Lung replaced by transplant
V42.7	Liver replaced by transplant
V42.81-V42.89	Other specified organ or tissue replaced by transplant
V43.21-V43.22	Heart replaced by other means
V43.3	Heart valve replaced by other means
V43.4	Blood vessel replaced by other means
V58.2	Transfusion of blood products
V58.61	Long-term (current) use of anticoagulants
V58.83	Encounter for therapeutic drug monitoring

Indications

- 1. A PT may be used to assess patients taking warfarin. The PT is generally not useful in monitoring patients receiving heparin who are not taking warfarin.
- 2. A PT may be used to assess patients with signs or symptoms of abnormal bleeding or thrombosis. For example:

NCD 190.17



- Swollen extremity with or without prior trauma
- Unexplained bruising
- · Abnormal bleeding, hemorrhage or hematoma
- Petechiae or other signs of thrombocytopenia that could be due to Disseminated Intravascular Coagulation
- 3. A PT may be useful in evaluating patients who have a history of a condition known to be associated with the risk of bleeding or thrombosis that is related to the extrinsic coagulation pathway. Such abnormalities may be genetic or acquired. For example:
 - Dysfibrinogenemia
 - Afibrinogenemia (complete)
 - Acute or chronic liver dysfunction or failure, including Wilson's disease and Hemochromatosis
 - Disseminated intravascular coagulation (DIC)
 - Congenital and acquired deficiencies of factors II, V, VII, X
 - Vitamin K deficiency
 - Lupus erythematosus
 - Hypercoagulable state
 - Paraproteinemia
 - Lymphoma
 - Amyloidosis
 - Acute and chronic leukemias
 - Plasma cell dyscrasia
 - HIV infection
 - Malignant neoplasms
 - Hemorrhagic fever
 - Salicylate poisoning
 - Obstructive jaundice
 - Intestinal fistula
 - Malabsorption syndrome
 - Colitis
 - Chronic diarrhea
 - · Presence of peripheral venous or arterial thrombosis or pulmonary emboli or myocardial infarction
 - Patients with bleeding or clotting tendencies
 - Organ transplantation
 - Presence of circulating coagulation inhibitors
- 4. A PT may be used to assess the risk of hemorrhage or thrombosis in patients who are going to have a medical intervention known to be associated with increased risk of bleeding or thrombosis. For example:

NCD 190.17



- Evaluation prior to invasive procedures or operations of patients with personal history of bleeding or a condition associated with coagulopathy.
- Prior to the use of thrombolytic medication

Limitations

- 1. When an ESRD patient is tested for PT, testing more frequently than weekly requires documentation of medical necessity, e.g., other than chronic renal failure or renal failure unspecified.
- 2. The need to repeat this test is determined by changes in the underlying medical condition and/or the dosing of warfarin. In a patient on stable warfarin therapy, it is ordinarily not necessary to repeat testing more than every two to three weeks. When testing is performed to evaluate a patient with signs or symptoms of abnormal bleeding or thrombosis and the initial test result is normal, it is ordinarily not necessary to repeat testing unless there is a change in the patient's medical status.
- 3. Since the INR is a calculation, it will not be paid in addition to the PT when expressed in seconds, and is considered part of the conventional PT test.
- 4. Testing prior to any medical intervention associated with a risk of bleeding and thrombosis (other than thrombolytic therapy) will generally be considered medically necessary only where there are signs or symptoms of a bleeding or thrombotic abnormality or a personal history of bleeding, thrombosis or a condition associated with a coagulopathy. Hospital/clinic-specific policies, protocols, etc., in and of themselves, cannot alone justify coverage.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

CMD Clinical Laboratory Workgroup

1999 CPT Physicians' Current Procedural Terminology, American Medical Association

Wintrobe's Clinical Hematology 9th Ed. Lea and Febinger

Harrison's Principles of Internal Medicine, McGraw Hill, 14th Ed., 1997.

Diagnostic Tests Handbook, Springhouse Corporation, 1987.

Hemostasis and Thrombosis: Basic Principles and Clinical Practice. Colman, et al editors, J.B. Lippincott, 3rd Edition, 1994, pp 896-898 and 1045-1046.

Disorders of Hemostasis, Ratnoff, Oscar D. and Forbes, Charles D., W.B. Saunders Co. 1996.

Merck Manual of Diagnosis and Therapy, 16th Edition (should be replaced w/17th Edition 1999.)

"Performance of the Coumatrak System at a Large Anticoagulation Clinic". Coagulation and Transfusion Medicine. January 1995. p. 98-102.

"Monitoring Oral Anticoagulation Therapy with Point-of-Care Devices. Correlation and Caveats". *Clinical Chemistry:* No. 9, 1997, p1785-1786.

"College of American Pathologists Conference XXXI on Laboratory Monitoring of Anticoagulant Therapy". *Arch.Pathol.Lab.Med.* Vol.122. September 1998. p. 768-780.

NCD 190.17



"A Structured Teaching and Self-management Program for Patients Receiving Oral Anti-coagulation". JAMA; 1999; 281: 145-150.



190.18 - Serum Iron Studies

Previously Listed as Edit 7

Description

Serum iron studies are useful in the evaluation of disorders of iron metabolism, particularly iron deficiency and iron excess. Iron studies are best performed when the patient is fasting in the morning and has abstained from medications that may influence iron balance.

Iron deficiency is the most common cause of anemia. In young children on a milk diet, iron deficiency is often secondary to dietary deficiency. In adults, iron deficiency is usually the result of blood loss and is only occasionally secondary to dietary deficiency or malabsorption. Following major surgery the patient may have iron deficient erythropoietin for months or years if adequate iron replacement has not been given. High doses of supplemental iron may cause the serum iron to be elevated. Serum iron may also be altered in acute and chronic inflammatory and neoplastic conditions.

Total Iron Binding Capacity (TIBC) is an indirect measure of transferring, a protein that binds and transports iron. TIBC quantifies transferring by the amount of iron that it can bind. TIBC and transferring are elevated in iron deficiency, and with oral contraceptive use, and during pregnancy. TIBC and transferring may be decreased in malabsorption syndromes or in those affected with chronic diseases. The percent saturation represents the ratio of iron to the TIBC.

Assays for ferreting are also useful in assessing iron balance. Low concentrations are associated with iron deficiency and are highly specific. High concentrations are found in hemosiderosis (iron overload without associated tissue injury) and hemochromatosis (iron overload with associated tissue injury). In these conditions the iron is elevated, the TIBC and transferrin are within the reference range or low, and the percent saturation is elevated. Serum ferritin can be useful for both initiating and monitoring treatment for iron overload.

Transferrin and ferritin belong to a group of serum proteins known as acute phase reactants, and are increased in response to stressful or inflammatory conditions and also can occur with infection and tissue injury due to surgery, trauma or necrosis. Ferritin and iron/TIBC (or transferrin) are affected by acute and chronic inflammatory conditions, and in patients with these disorders, tests of iron status may be difficult to interpret.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82728	Ferritin
83540	Iron
83550	Iron Binding capacity
84466	Transferrin

NCD 190.18



ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
002.0-002.9	Typhoid and paratyphoid fevers
003.0-003.9	Other salmonella infections
006.0-006.9	Amebiasis
007.0-007.9	Other protozoal intestinal diseases
008.00	Intestinal infections due to Escherichia coli [E. coli], unspecified
008.01	Intestinal infections due to enteropathogenic E. coli
008.02	Intestinal infections due to enterotoxigenic E. coli
008.03	Intestinal infections due to enteroinvasive E. coli
008.04	Intestinal infections due to enterohemorrhagic E. coli
008.09	Intestinal infections due to other intestinal E. coli organisms
008.1	Intestinal infections due to Arizona group of paracolon bacilli
008.2	Intestinal infections due to Aerobacter aerogenes
008.3	Intestinal infections due to Proteus (mirabilis) (morganii)
008.41	Intestinal infections due to Staphylococcus
008.42	Intestinal infections due to Pseudomonas
008.43	Intestinal infections due to Campylobacter
008.44	Intestinal infections due to Yersinia enterocolitis
008.45	Intestinal infections due to Clostridium difficile
008.46	Intestinal infections due to other anaerobes
008.47	Intestinal infections due to other gram-negative bacteria
008.49	Intestinal infections due to other bacteria
008.5	Bacterial enteritis, unspecified
008.61	Enteritis due to Rotavirus
008.62	Enteritis due to Adenovirus
008.63	Enteritis due to Norwalk virus
008.64	Enteritis due to other small round viruses (SRVs)
008.65	Enteritis due to Calicivirus
008.66	Enteritis due to Astrovirus
008.67	Enteritis due to Enterovirus, not elsewhere classified
008.69	Other viral enteritis
008.8	Intestinal infections due to other organisms, not elsewhere classified
009.0-009.3	III-defined intestinal infections
011.50-011.56	Tuberculous bronchiectasis
014.00-014.86	Tuberculosis of intestines, peritoneum, and mesenteric glands
015.00-015.96	Tuberculosis of bones and joints
016.00-016.06	Tuberculosis of kidney

NCD 190.18



Code	Description
016.10-016.16	Tuberculosis of bladder
016.20-016.26	Tuberculosis of ureter
016.30-016.36	Tuberculosis of other urinary organs
042	Human Immunodeficiency virus (HIV) disease
070.0-070.9	Viral hepatitis
140.0-149.9	Malignant neoplasm of lip oral cavity and pharynx
150.0-159.9	Malignant neoplasm of digestive organs and peritoneum
160.0-165.9	Malignant neoplasm of respiratory and intrathoracic organs
170.0-176.9	Malignant neoplasm of bone, connective tissue, skin and breast
179-189.9	Malignant neoplasm of genitourinary organs
190.0-199.1	Malignant neoplasm of other and unspecified sites
199.2	Malignant neoplasm associated with transplanted organ
200.00-200.28	Lymphosarcoma and reticulosarcoma; Burkitt's tumor or lymphoma
200.30-200.38	Marginal zone lymphoma
200.40-200.48	Mantle cell lymphoma
200.50-200.58	Primary central nervous system lymphoma
200.60-200.68	Anaplastic large cell lymphoma
200.70-200.78	Large cell lymphoma
200.80-200.88	Malignant tumors of lymphatic tissue; other named variants
201.00-201.98	Hodgkin's disease
202.00-202.68	Other malignant neoplasms of lymphoid and histiocytic tissue
202.70-202.78	Peripheral T-cell lymphoma
202.80-202.98	Other lymphomas; other and unspecified malignant neoplasms of lymphoid and histiocytic tissue
203.00-203.01	Multiple myeloma, without mention of having achieved remission and in remission
203.02	Multiple myeloma, in relapse
203.10-203.11	Plasma cell leukemia, without mention of having achieved remission and in remission
203.12	Plasma cell leukemia, in relapse
203.80-203.81	Other immunoproliferative neoplasms, without mention of having achieved remission and in remission
203.82	Other immunoproliferative neoplasms, in relapse
204.00-204.01	Acute lymphoid leukemia, without mention of having achieved remission and in remission
204.02	Acute lymphoid leukemia, in relapse
204.10-204.11	Chronic lymphoid leukemia, without mention of having achieved remission and in remission
204.12	Chronic lymphoid leukemia, in relapse
204.20-204.21	Subacute lymphoid leukemia, without mention of having achieved remission and in remission
204.22	Subacute lymphoid leukemia, in relapse

NCD 190.18



Code	Description
204.80-204.81	Other lymphoid leukemia, without mention of having achieved remission and in remission
204.82	Other lymphoid leukemia, in relapse
204.90-204.91	Unspecified lymphoid leukemia, without mention of having achieved remission and in remission
204.92	Unspecified lymphoid leukemia, in relapse
205.00-205.01	Acute myeloid leukemia, without mention of having achieved remission and in remission
205.02	Acute myeloid leukemia, In relapse
205.10-205.11	Chronic myeloid leukemia, without mention of having achieved remission and in remission
205.12	Chronic myeloid leukemia, in relapse
205.20-205.21	Subacute myeloid leukemia, without mention of having achieved remission and in remission
205.22	Subacute myeloid leukemia, in relapse
205.30-205.31	Myeloid sarcoma, without mention of having achieved remission and in remission
205.32	Myeloid sarcoma, in relapse
205.80-205.81	Other myeloid leukemia, without mention of having achieved remission and in remission
205.82	Other myeloid leukemia, in relapse
205.90-205.91	Unspecified myeloid leukemia, without mention of having achieved remission and in remission
205.92	Unspecified myeloid leukemia, in relapse
206.00-206.01	Acute monocytic leukemia, without mention of having achieved remission and in remission
206.02	Acute monocytic leukemia, in relapse
206.10-206.11	Chronic monocytic leukemia, without mention of having achieved remission and in remission
206.12	Chronic monocytic leukemia, in relapse
206.20-206.21	Subacute monocytic leukemia, without mention of having achieved remission and in remission
206.22	Subacute monocytic leukemia, in relapse
206.80-206.81	Other monocytic leukemia, without mention of having achieved remission and in remission
206.82	Other monocytic leukemia, in relapse
206.90-206.91	Unspecified monocytic leukemia, without mention of having achieved remission and in remission
206.92	Unspecified monocytic leukemia, in relapse
207.00-207.01	Acute erythremia and erythroleukemia, without mention of having achieved remission and in remission
207.02	Acute erythremia and erythroleukemia, in relapse

NCD 190.18



Code	Description
207.10-207.11	Chronic erythremia, without mention of having achieved remission and in remission
207.12	Chronic erythremia, in relapse
207.20-207.21	Megakaryocytic leukemia, without mention of having achieved remission and in remission
207.22	Megakaryocytic leukemia, in relapse
207.80-207.81	Other specified leukemia, without mention of having achieved remission and in remission
207.82	Other specified leukemia, in relapse
208.00-208.01	Acute leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.02	Acute leukemia of unspecified cell type, in relapse
208.10-208.11	Chronic leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.12	Chronic leukemia of unspecified cell type, in relapse
208.20-208.21	Subacute leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.22	Subacute leukemia of unspecified cell type, In relapse
208.80-208.81	Other leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.82	Other leukemia of unspecified cell type, in relapse
208.90-208.91	Unspecified leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.92	Unspecified leukemia of unspecified cell type, in relapse
209.00-209.03	Malignant carcinoid tumors of the small intestine
209.10-209.17	Malignant carcinoid tumors of the appendix, large intestine and rectum
209.20-209.27, 209.29	Malignant carcinoid tumors of other and unspecified sites
209.30	Malignant poorly differentiated neuroendocrine tumor, any site
209.31	Merkel cell carcinoma of the face
209.32	Merkel cell carcinoma of the scalp and neck
209.33	Merkel cell carcinoma of the upper limb
209.34	Merkel cell carcinoma of the lower limb
209.35	Merkel cell carcinoma of the trunk
209.36	Merkel cell carcinoma of other sites
209.40-209.43	Benign carcinoid tumors of the small intestine
209.50-209.57	Benign carcinoid tumors of the appendix, large intestine and rectum
209.60-209.67, 209.69	Benign carcinoid tumor of other and unspecified sites
209.70	Secondary neuroendocrine tumor, unspecified site
209.71	Secondary neuroendocrine tumor of distant lymph nodes
209.72	Secondary neuroendocrine tumor of liver
209.73	Secondary neuroendocrine tumor of bone

NCD 190.18



Code	Description
209.74	Secondary neuroendocrine tumor of peritoneum
209.75	Secondary Merkel cell carcinoma
209.79	Secondary neuroendocrine tumor of other sites
210.0-229.9	Benign neoplasms
230.0-233.2	Carcinoma in situ (various)
233.30	Carcinoma in situ, unspecified female genital organ
233.31	Carcinoma in situ, vagina
233.32	Carcinoma in situ, vulva
233.39	Carcinoma in situ, other female genital organ
233.4-234.9	Carcinoma in situ (various)
235.0-235.9	Neoplasms of uncertain behavior of digestive and respiratory systems
236.0-236.99	Neoplasms of uncertain behavior of genitourinary organs
237.0-237.72	Neoplasms of uncertain behavior of endocrine glands and nervous system
237.73	Schwannomatosis
237.79	Other neurofibromatosis
237.9	Other and uncertain parts of the nervous system
238.0-238.6	Neoplasms of uncertain behavior of other and unspecified sites and tissues
238.71-238.76	Neoplasms of other lymphatic and hematopoietic tissues
238.77	Post-transplant lymphoproliferative disorder (PTLD)
238.79, 238.8, 238.9	Neoplasms of uncertain behavior
239.0-239.7	Neoplasms of unspecified nature
239.81	Neoplasms of unspecified nature, retina and choroid
239.89	Neoplasms of unspecified nature, other specified sites
239.9	Neoplasms of unspecified nature, site unspecified
249.00-249.01	Secondary diabetes mellitus without mention of complication
249.10-249.11	Secondary diabetes mellitus with ketoacidosis
249.20-249.21	Secondary diabetes mellitus with hyperosmolarity
249.30-249.31	Secondary diabetes mellitus with other coma
249.40-249.41	Secondary diabetes mellitus with renal manifestations
249.50-249.51	Secondary diabetes mellitus with ophthalmic manifestations
249.60-249.61	Secondary diabetes mellitus with neurological manifestations
249.70-249.71	Secondary diabetes mellitus with peripheral circulatory disorders
249.80-249.81	Secondary diabetes mellitus with other specified manifestations
249.90-249.91	Secondary diabetes mellitus with unspecified complication
250.00-250.93	Diabetes mellitus
253.2	Panhypopituitarism
253.7	latrogenic pituitary disorders
253.8	Other disorders of the pituitary and other syndromes of diencephalohypophysial origin

NCD 190.18



Code	Description
256.31-256.39	Other ovarian failure
257.2	Other testicular hypofunction
260	Kwashiorkor
261	Nutritional marasmus
262	Other severe protein-calorie malnutrition
263.0-263.9	Other and unspecified protein-calorie malnutrition
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
277.1	Disorders of porphyrin metabolism
280.0-280.9	Iron deficiency anemias
281.0-281.9	Other deficiency anemias
282.41-282.42, 282.49	Thalassemias
282.60-282.63	Sickle-cell diseases
282.64	Sickle-cell/Hgb C disease with crisis
282.68	Other sickle-cell disease without crisis
282.69	Other sickle-cell disease with crisis
285.0	Sideroblastic anemia (includes hemochromatosis with refractory anemia)
285.1	Acute post-hemorrhagic anemia
285.3	Antineoplastic chemotherapy induced anemia
285.21	Anemia in chronic kidney disease
285.22	Anemia in neoplastic disease
285.29	Anemia of other chronic disease
285.9	Anemia, unspecified
286.0-286.9	Coagulation defects (congenital factor disorders)
287.0-287.39	Allergic purpura; qualitative platelet defects; other non- thrombocytopenic purpuras; primary thrombocytopenia
287.41	Posttransfusion purpura
287.49	Other secondary thrombocytopenia
287.5-287.9	Thrombocytopenia, unspecified; other specified and unspecified hemorrhagic conditions
289.52	Splenic sequestration
306.4	Physiological malfunction arising from mental factors, gastrointestinal
307.1	Anorexia nervosa
307.50-307.59	Other and unspecified disorders of eating
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease

NCD 190.18



Code	Description
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease
404.02	Hypertensive heart & chronic kidney disease, malignant, without heart failure & with chronic kidney disease stage V or end stage renal disease
404.03	Hypertensive heart & chronic kidney disease, malignant, with heart failure & with chronic kidney disease stage Or end stage renal disease
404.12	Hypertensive heart & chronic kidney disease, benign, without heart failure & with chronic kidney disease stage Or end stage renal disease
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure & chronic kidney disease stage V or end stage renal disease
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure & with chronic kidney disease stage V or end stage renal disease
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease
425.4	Other primary cardiomyopathies
425.5	Alcoholic cardiomyopathy
425.7	Nutritional and metabolic cardiomyopathy
425.8	Cardiomyopathy in other diseases classified elsewhere
425.9	Secondary cardiomyopathy, unspecified
426.0-426.81, 426.89, 426.9	Conduction disorders
427.0-427.9	Cardiac dysrhythmias
428.0-428.9	Heart failure
530.7	Gastroesophageal laceration-hemorrhage syndrome
530.82	Esophageal hemorrhage
531.00-531.91	Gastric ulcer
532.00-532.91	Duodenal ulcer
533.00-533.91	Peptic ulcer, site unspecified
534.00-534.91	Gastrojejunal ulcer
535.00-535.61	Gastritis and duodenitis
535.70	Eosinophilic gastritis, without mention of obstruction
535.71	Eosinophilic gastritis, with obstruction
536.0-536.9	Disorders of function of stomach
537.83	Angiodysplasia of stomach and duodenum with hemorrhage
537.84	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
555.0-555.9	Regional enteritis
556.0-556.9	Ulcerative colitis
557.0	Acute vascular insufficiency of intestine
557.1	Chronic vascular insufficiency of intestine
562.02	Diverticulosis of small intestine with hemorrhage
562.03	·
	Diverticulitis of small intestine with hemorrhage

NCD 190.18



Code	Description
562.13	Diverticulitis of colon with hemorrhage
569.3	Hemorrhage of rectum and anus
569.85	Angiodysplasia of intestine with hemorrhage
569.86	Dieulafoy lesion (hemorrhagic) of intestine
569.87	Vomiting of fecal matter
570	Acute and subacute necrosis of liver
571.0-571.9	Chronic liver disease and cirrhosis
572.0	Abscess of liver
572.1	Portal pyemia
572.2	Hepatic encephalopathy
572.3	Portal hypertension
572.4	Hepatorenal syndrome
572.8	Other sequelae of chronic liver disease
573.0-573.9	Other disorders of liver
578.0-578.9	Gastrointestinal hemorrhage
579.0-579.3	Intestinal malabsorption
579.8-579.9	Other specified and unspecified intestinal malabsorption
581.0-581.9	Nephrotic syndrome
585.4 – 585.9	Chronic kidney disease
586	Renal failure, unspecified
608.3	Atrophy of testis
626.0-626.9	Disorders of menstruation and other abnormal bleeding from female genital tract
627.0	Premenopausal menorrhagia
627.1	Postmenopausal bleeding
648.20-648.24	Other current conditions in the mother classifiable elsewhere, but complicating pregnancy, childbirth, or the puerperium: Anemia
698.0-698.9	Pruritus and related conditions
704.00-704.09	Alopecia
709.00-709.09	Dyschromia
713.0	Arthropathy associated with other endocrine and metabolic disorders
716.40-716.99	Other and unspecified arthropathies
719.40-719.49	Pain in joint
773.2	Hemolytic disease due to other and unspecified isoimmunization
773.3	Hydrops fetalis due to isoimmunization
773.4	Kernicterus due to isoimmunization
773.5	Late anemia due to isoimmunization
783.9	Other symptoms concerning nutrition, metabolism and development
790.01-790.09	Abnormality of red blood cells
790.4	Nonspecific elevation of levels of transaminase or lactic acid dehydrogenase [LDH]

NCD 190.18



Code	Description
790.5	Other nonspecific abnormal serum enzyme levels
790.6	Other abnormal blood chemistry
799.4	Cachexia
964.0	Poisoning by agents primarily affecting blood constituents, iron compounds
984.0-984.9	Toxic effect of lead and its compounds (including fumes)
996.85	Complications of transplanted organ, bone marrow
999.80	Transfusion reaction, unspecified
999.83	Hemolytic transfusion reaction, incompatibility unspecified
999.84	Acute hemolytic transfusion reaction, incompatibility unspecified
999.85	Delayed hemolytic transfusion reaction, incompatibility unspecified
999.89	Other transfusion reaction
V08	Asymptomatic HIV infection
V12.1	Personal history of nutritional deficiency
V12.3	Personal history of diseases of blood and blood forming organs
V15.1	Personal history of surgery to heart and great vessels
V15.21	Personal history of undergoing in utero procedure during pregnancy
V15.22	Personal history of undergoing in utero procedure while a fetus
V15.29	Surgery to other organs
V43.21-V43.22	Heart replaced by other means
V43.3	Heart valve replaced by other means
V43.4	Blood vessel replaced by other means
V43.60	Unspecified joint replaced by other means
V56.0	Extracorporeal dialysis
V56.8	Other dialysis

Indications

- 1. Ferritin, iron and either iron binding capacity or transferrin are useful in the differential diagnosis of iron deficiency, anemia, and for iron overload conditions.
 - a. The following presentations are examples that may support the use of these studies for evaluating iron deficiency:
- Certain abnormal blood count values (i.e., decreased Mean Corpuscular Volume (MCV), decreased hemoglobin/hematocrit when the MCV is low or normal, or increased Red cell Distribution Width (RDW) and low or normal MCV)
- Abnormal appetite (pica)
- Acute or chronic gastrointestinal blood loss
- Hematuria
- Menorrhagia
- Malabsorption
- Status post-gastrectomy
- Status post-gastrojejunostomy

NCD 190.18



- Malnutrition
- Preoperative autologous blood collection(s)
- Malignant, chronic inflammatory and infectious conditions associated with anemia which may present in a similar manner to iron deficiency anemia
- Following a significant surgical procedure where blood loss had occurred and had not been repaired with adequate iron replacement.
 - b. The following presentations are examples that may support the use of these studies for evaluating iron overload:
- Chronic Hepatitis
- Diabetes
- Hyperpigmentation of skin
- Arthropathy
- Cirrhosis
- Hypogonadism
- Hypopituitarism
- Impaired porphyrin metabolism
- Heart failure
- Multiple transfusions
- Sideroblastic anemia
- Thalassemia major
- Cardiomyopathy, cardiac dysrhythmias and conduction disturbances
- 2. Follow-up testing may be appropriate to monitor response to therapy, e.g., oral or parenteral iron, ascorbic acid, and erythropoietin.
- 3. Iron studies may be appropriate in patients after treatment for other nutritional deficiency anemias, such as folate and vitamin B12, because iron deficiency may not be revealed until such a nutritional deficiency is treated.
- 4. Serum ferritin may be appropriate for monitoring iron status in patients with chronic renal disease with or without dialysis.
- 5. Serum iron may also be indicated for evaluation of toxic effects of iron and other metals (e.g., nickel, cadmium, aluminum, and lead) whether due to accidental, intentional exposure or metabolic causes.

Limitations

1. Iron studies should be used to diagnose and manage iron deficiency or iron overload states. These tests are not to be used solely to assess acute phase reactants where disease management will be unchanged. For example, infections and malignancies are associated with elevations in acute phase reactants such as ferritin, and decreases in serum iron concentration, but iron studies would only be medically necessary if results of iron studies might alter the management of the primary diagnosis or might warrant direct treatment of an iron disorder or condition.



- 2. If a normal serum ferritin level is documented, repeat testing would not ordinarily be medically necessary unless there is a change in the patient's condition, and ferritin assessment is needed for the ongoing management of the patient. For example, a patient presents with new onset insulin-dependent diabetes mellitus and has a serum ferritin level performed for the suspicion of hemochromatosis. If the ferritin level is normal, the repeat ferritin for diabetes mellitus would not be medically necessary.
- 3. When an End Stage Renal Disease (ESRD) patient is tested for ferritin, testing more frequently than every three months requires documentation of medical necessity (e.g., other than chronic renal failure or renal failure, unspecified).
- 4. It is ordinarily not necessary to measure both transferrin and TIBC at the same time because TIBC is an indirect measure of transferrin. When transferrin is ordered as part of the nutritional assessment for evaluating malnutrition, it is not necessary to order other iron studies unless iron deficiency or iron overload is suspected as well.
- 5. It is not ordinarily necessary to measure either iron/TIBC (or transferrin) and ferritin in initial patient testing. If clinically indicated after evaluation of the initial iron studies, it may be appropriate to perform additional iron studies either on the initial specimen or on a subsequently obtained specimen. After a diagnosis of iron deficiency or iron overload is established, either iron/TIBC (or transferrin) or ferritin may be medically necessary for monitoring, but not both.
- 6. It would not ordinarily be considered medically necessary to do a ferritin as a preoperative test except in the presence of anemia or recent autologous blood collections prior to the surgery.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

CDC. Recommendations to prevent and control iron deficiency in the United States. MMWR 1998; 47(RR-3):1-29.

Powell LW, George DK, McDonnell SM, Kowdley KV. Diagnosis of hemochromatosis. Ann.Intern.Med. 1998;129:925-931.

Spiekerman AM. Proteins used in nutritional assessment. Clin.Lab.Med. 1993;13:353-369.

Wallach JB. Handbook of Interpretation of Diagnostic Tests. Lippincott-Raven Publishers (Philadelphia) 1998, pp. 170-180.

Van Walraven C, Goel V, Chan B. Effect of Population-Based Interventions on Laboratory Utilization. JAMA. 1998; 280:2028-2033.

Guyatt GH, Patterson C, Ali M, Singer J, Levine M, Turpie I, Meyer R. Diagnosis of Iron-Deficiency Anemia in the Elderly. AmJMed. 1990; 88:205-209.

Burns ER, Goldberg SN, Lawrence C, Wenz B. AJCP. 1990; 3: 240-245.

Burns ER, et al. Brief Clinical Observations. AmJMed. 1991; 90:653-654.

Yang Q, et al. Hemochromatosis-associated Mortality in the United States from 1979 to 1992: An Analysis of Multiple-Cause Mortality Data. AnIntMed.1998;129:946-953.



190.19 - Collagen Crosslinks, Any Method

Previously Listed as Edit 8

Description

Collagen crosslinks, part of the matrix of bone upon which bone mineral is deposited, are biochemical markers the excretion of which provides a quantitative measurement of bone resorption. Elevated levels of urinary collagen crosslinks indicate elevated bone resorption. Elevated bone resorption contributes to age-related and postmenopausal loss of bone leading to osteoporosis and increased risk of fracture. The collagen crosslinks assay can be performed by immunoassay or by high performance liquid chromatography (HPLC). Collagen crosslink immunoassays measure the pyridinoline crosslinks and associated telopeptides in urine.

Bone is constantly undergoing a metabolic process called turnover or remodeling. This includes a degradation process, bone resorption, mediated by the action of osteoclasts, and a building process, bone formation, mediated by the action of osteoblasts. Remodeling is required for the maintenance and overall health of bone and is tightly coupled; that is, resorption and formation must be in balance. In abnormal states of bone remodeling, when resorption exceeds formation, it results in a net loss of bone. The measurement of specific, bone-derived resorption products provides analytical data about the rate of bone resorption.

Osteoporosis is a condition characterized by low bone mass and structural deterioration of bone tissue, leading to bone fragility and an increased susceptibility to fractures of the hip, spine, and wrist. The term primary osteoporosis is applied where the causal factor in the disease is menopause or aging. The term secondary osteoporosis is applied where the causal factor is something other than menopause or aging, such as long-term administration of glucocorticosteroids, endocrine-related disorders (other than loss of estrogen due to menopause), and certain bone diseases such as cancer of the bone.

With respect to quantifying bone resorption, collagen crosslink tests can provide adjunct diagnostic information in concert with bone mass measurements. Bone mass measurements and biochemical markers may have complementary roles to play in assessing effectiveness of osteoporosis treatment. Proper management of osteoporosis patients, who are on long-term therapeutic regimens, may include laboratory testing of biochemical markers of bone turnover, such as collagen crosslinks, that provide a profile of bone turnover responses within weeks of therapy. Changes in collagen crosslinks are determined following commencement of antiresorptive therapy. These can be measured over a shorter time interval when compared to bone mass density. If bone resorption is not elevated, repeat testing is not medically necessary.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82523	Collagen cross links, any method

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

NCD 190.19



Code	Description
242.00-242.91	Thyrotoxicosis
245.2	Chronic lymphocytic thyroiditis (only if thyrotoxic)
246.9	Unspecified disorder of thyroid
252.00-252.02, 252.08	Hyperparathyroidism
256.2	Postablative ovarian failure
256.31-256.39	Other ovarian failure
256.8	Other ovarian dysfunction
256.9	Unspecified ovarian dysfunction
268.9	Unspecified vitamin D deficiency
269.3	Mineral deficiency, not elsewhere classified
627.0	Premenopausal menorrhagia
627.1	Postmenopausal bleeding
627.2	Symptomatic menopausal or female climacteric state
627.4	Symptomatic states associated with artificial menopause
627.8	Other specified menopausal and postmenopausal disorders
627.9	Unspecified menopausal & postmenopausal disorder
731.0	Osteitis deformans w/o mention of bone tumor (Paget's bone disease)
733.00-733.09	Osteoporosis
733.10-733.19	Pathological fracture
733.90	Disorder of bone and cartilage, unspecified
805.8	Fracture of vertebral column without mention of spiral cord injury, unspecified, closed
V58.65	Long-term (current) use of steroids
V58.69	Long-term (current) use of other medications

Indications

Generally speaking, collagen crosslink testing is useful mostly in "fast losers" of bone. The age when these bone markers can help direct therapy is often pre-Medicare. By the time a fast loser of bone reaches age 65, she will most likely have been stabilized by appropriate therapy or have lost so much bone mass that further testing is useless. Coverage for bone marker assays may be established, however, for younger Medicare beneficiaries and for those men and women who might become fast losers because of some other therapy such as glucocorticoids. Safeguards should be incorporated to prevent excessive use of tests in patients for whom they have no clinical relevance.

Collagen crosslinks testing is used to:

- Identify individuals with elevated bone resorption, who have osteoporosis in whom response to treatment is being monitored.
- Predict response (as assessed by bone mass measurements) to FDA approved antiresorptive therapy in postmenopausal women.
- Assess response to treatment of patients with osteoporosis, Paget's disease of the bone, or risk for osteoporosis where treatment may include FDA approved antiresorptive agents, antiestrogens or selective estrogen receptor moderators.

NCD 190.19



Limitations

Because of significant specimen to specimen collagen crosslink physiologic variability (15-20%), current recommendations for appropriate utilization include: one or two base-line assays from specified urine collections on separate days; followed by a repeat assay about 3 months after starting anti-resorptive therapy; followed by a repeat assay in 12 months after the 3-month assay; and thereafter not more than annually, unless there is a change in therapy in which circumstance an additional test may be indicated 3 months after the initiation of new therapy.

Some collagen crosslink assays may not be appropriate for use in some disorders, according to FDA labeling restrictions.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Arnaud CD. Osteoporosis: Using 'bone markers' for diagnosis and monitoring. Geriatrics 1996; 51:24-30.

Chesnut CH, III, Bell NH, Clark G, et al. Hormone replacement therapy in postmenopausal women: urinary N-telopeptide of type I collagen monitors therapeutic effect and predicts response of bone mineral density. Am. J. Med. 1997;102:29-37.

Garnero P, Delmas PD. Clinical usefulness of markers of bone remodelling in osteoporosis. In: Meunier PJ. (ed).Osteoporosis: diagnosis and management. London: Martin Dunitz Ltd 1998:79-101.

Garnero P, Shih WJ, Gineyts E, et al. Comparison of new biochemical markers of bone turnover in late postmenopausal osteoporotic women in response to alendronate treatment. J. Clin. Endocrinol. Metab.1994;79:1693-700.

Harper KD, Weber TJ. Secondary osteoporosis - Diagnostic considerations.

Endocrinol. Metab.Clin. North Am. 1998;27:325-48.

Hesley RP, Shepard KA, Jenkins DK, Riggs BL. Monitoring estrogen replacement therapy and identifying rapid bone losers with an immunoassay for deoxypyridinoline. Osteoporos.Int. 1998:8:159-64.

Melton LJ, III, Khosla S, Atkinson EJ, et al. Relationship of bone turnover to bone density and fractures. J.Bone Miner.Res.1997;12:1083-91.

Millard PS. Prevention of osteoporosis: making sense of the published evidence. In: Rosen CJ (ed). Osteoporosis: diagnostic & therapeutic principles. Totowa: Humana Press. 1996:275-85.

Rosen CJ. Biochemical markers of bone turnover. In: Rosen CJ(ed). Osteoporosis: diagnostic and therapeutic principles. Totowa: Humana Press Inc. 1996:129-41.

Schneider DL, Barrett-Connor EL. Urinary N-Telopeptide levels discriminate normal, osteopenic, and osteoporotic bone mineral density. Arch. Intern. Med. 1997;157:1241-5.



190.20 - Blood Glucose Testing

Previously Listed as Edit 9

Description

This policy is intended to apply to blood samples used to determine glucose levels. Blood glucose determination may be done using whole blood, serum or plasma. It may be sampled by capillary puncture, as in the fingerstick method, or by vein puncture or arterial sampling. The method for assay may be by color comparison of an indicator stick, by meter assay of whole blood or a filtrate of whole blood, using a device approved for home monitoring, or by using a laboratory assay system using serum or plasma. The convenience of the meter or stick color method allows a patient to have access to blood glucose values in less than a minute or so and has become a standard of care for control of blood glucose, even in the inpatient setting.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82947	Glucose; quantitative, blood (except reagent strip)
82948	Glucose; blood, reagent strip
82962	Glucose, blood by glucose monitoring device cleared by FDA for home use.

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
011.00-011.96	Tuberculosis
038.0, 038.10-038.19, 038.2, 038.3, 038.40-038.49, 038.8, 038.9	Septicemia
112.1	Recurrent vaginal candidiasis
112.3	Interdigital candidiasis
118	Opportunistic mycoses
157.4	Malignant neoplasm of Islets of Langerhans
158.0	Malignant neoplasm of retroperitoneum
211.7	Benign neoplasm of Islets of Langerhans
242.00-242.91	Thyrotoxicosis
249.00-249.01	Secondary diabetes mellitus without mention of complication
249.10-249.11	Secondary diabetes mellitus with ketoacidosis
249.20-249.21	Secondary diabetes mellitus with hyperosmolarity
249.30-249.31	Secondary diabetes mellitus with other coma
249.40-249.41	Secondary diabetes mellitus with renal manifestations
249.50-249.51	Secondary diabetes mellitus with ophthalmic manifestations
249.60-249.61	Secondary diabetes mellitus with neurological manifestations



Code	Description
249.70-249.71	Secondary diabetes mellitus with peripheral circulatory disorders
249.80-249.81	Secondary diabetes mellitus with other specified manifestations
249.90-249.91	Secondary diabetes mellitus with unspecified complication
250.00-250.93	Diabetes mellitus
251.0-251.9	Disorders of pancreatic internal secretion
253.0-253.9	Disorders of the pituitary gland
255.0	Cushing syndrome
263.0-263.9	Malnutrition
271.0-271.9	Disorders of carbohydrate transport and metabolism
272.0-272.4	Disorders of lipoid metabolism
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
276.0	Hyperosmolality and/or hypernatremia
276.1	Hyposmolality and/or hyponatremia
276.2	Acidosis
276.3	Alkalosis
276.4	Mixed acid-base balance disorder
276.50-276.52	Volume depletion
276.61	Transfusion associated circulatory overload
276.69	Other fluid overload
276.7	Hyperpotassemia
276.8	Hypopotassemia
276.9	Electrolyte and fluid disorders not elsewhere classified
278.3	Hypercarotinemia
293.0	Delirium due to conditions classified elsewhere
294.9	Unspecified persistent mental disorders due to conditions classified elsewhere
298.9	Unspecified psychosis
300.9	Unspecified nonpsychotic mental disorder
310.1	Personality change due to conditions classified elsewhere
331.83	Mild cognitive impairment, so stated
337.9	Autonomic nervous system neuropathy
345.10-345.11	Generalized convulsive epilepsy
348.31	Metabolic encephalopathy
355.9	Neuropathy, not otherwise specified
356.9	Unspecified hereditary and idiopathic peripheral neuropathy
357.9	Unspecified inflammatory and toxic neuropathy
362.10	Background retinopathy
362.18	Retinal vasculitis

NCD 190.20



Code	Description
362.29	Nondiabetic proliferative retinopathy
362.50-362.57	Degeneration of macular posterior pole
362.60-362.66	Peripheral retinal degeneration
362.81-362.89	Other retinal disorders
362.9	Unspecified retinal disorders
365.04	Borderline glaucoma, ocular hypertension
365.32	Corticosteroid-induced glaucoma residual
366.00-366.09	Presenile cataract
366.10-366.19	Senile cataract
367.1	Acute myopia
368.8	Other specified visual disturbance
373.00	Blepharitis
377.24	Pseudopapilledema
377.9	Unspecified disorder of optic nerve and visual pathways
378.50-378.55	Paralytic strabismus
379.45	Argyll-Robertson pupils
410.00-410.92	Acute myocardial infarctions
414.00-414.06	Coronary atherosclerosis, of unspecified type of vessel, native or graft and of native coronary artery of transplanted heart
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart
414.10-414.12	Coronary atherosclerosis, aneurysm of heart (wall), aneurysm of coronary vessels, and dissection of coronary artery
414.19	Coronary atherosclerosis, other aneurysm of heart
414.3	Coronary atherosclerosis due to lipid rich plaque
425.9	Secondary cardiomyopathy, unspecified
440.23	Arteriosclerosis of extremities with ulceration
440.24	Arteriosclerosis of extremities with gangrene
440.9	Arteriosclerosis, not otherwise specified
458.0	Postural hypotension
462	Acute pharyngitis
466.0	Acute bronchitis
480.0-480.3, 480.8, 480.9	Viral pneumonia
481	Pneumococcal pneumonia
482.0-482.2, 482.30-482.32, 482.39, 482.40-482.42, 482.49, 482.81-482.84, 482.89, 482.9	Other bacterial pneumonia
483.0-483.1, 483.8	Pneumonia due to other specified organism
484.1, 484.3, 484.5-484.8	Pneumonia in infectious diseases classified elsewhere
485	Bronchopneumonia, organism unspecified
486	Pneumonia, organism unspecified
100	r noamona, organion anopositio

NCD 190.20



Code	Description
490	Recurrent bronchitis, not specified as acute or chronic
491.0-491.9	Chronic bronchitis
527.7	Disturbance of salivary secretion (drymouth)
528.00	Stomatitis and mucositis, unspecified
528.09	Other stomatitis and mucositis (ulcerative)
535.50-535.51	Gastritis
536.8	Dyspepsia
571.8	Other chronic nonalcoholic liver disease
572.0	Abscess of liver
572.1	Portal pyemia
572.2	Hepatic encephalopathy
572.3	Portal hypertension
572.4	Hepatorenal syndrome
572.8	Other sequelae of chronic liver disease
574.50-574.51	Choledocholithiasis
575.0-575.12	Cholecystitis
576.1	Cholangitis
577.0	Acute pancreatitis
574.50-574.51	Choledocholithiasis
577.1	Chronic pancreatitis
577.8	Pancreatic multiple calculi
590.00-590.9	Infections of the kidney
595.9	Recurrent cystitis
596.4	Bladder atony
596.53	Bladder paresis
599.0	Urinary tract infection, recurrent
607.84	Impotence of organic origin
608.89	Other disorders male genital organs
616.10	Vulvovaginitis
626.0	Amenorrhea
626.4	Irregular menses
628.9	Infertility - female
648.00	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, unspecified as to episode of care or not applicable
648.03	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, antipartum condition or complication
648.04	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, postpartum condition or complication
648.80	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, unspecified as to episode of care or not applicable
648.83	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, antepartum condition or complication

NCD 190.20



Code	Description
648.84	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, postpartum condition or complication
649.20	Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable
649.21	Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition
649.22	Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication
649.23	Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication
649.24	Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication
656.60-656.63	Fetal problems affecting management of mother large for-date of fetus
657.00-657.03	Polyhydramnios
680.0-680.9	Carbuncle and furuncle
686.00-686.9	Infections of skin and subcutaneous tissue
698.0	Pruritus ani
698.1	Pruritus of genital organs
704.1	Hirsutism
705.0	Anhidrosis
707.00-707.25, 707.8, 707.9	Chronic ulcer of skin
709.3	Degenerative skin disorders
729.1	Myalgia
730.07	Acute osteomyelitis of ankle and foot
730.17	Chronic osteomyelitis of ankle and foot
730.27	Unspecified osteomyelitis of ankle and foot
780.01	Coma
780.02	Transient alteration of awareness
780.09	Alteration of consciousness, other
780.2	Syncope and collapse
780.31	Febrile convulsions (simple), unspecified
780.32	Complex febrile convulsions
780.33	Post traumatic seizures
780.39	Seizures, not otherwise specified
780.4	Dizziness and giddiness
780.71	Malaise and fatigue
780.72	Functional quadriplegia
780.79	Other malaise and fatigue
780.8	Generalized hyperhidrosis
781.0	Abnormal involuntary movements
782.0	Loss of vibratory sensation
783.1	Abnormal weight gain

NCD 190.20



Code	Description
783.21	Abnormal loss of weight
783.5	Polydipsia
783.6	Polyphagia
785.0	Tachycardia
785.4	Gangrene
786.01	Hyperventilation
786.09	Dyspnea
786.50	Chest pain, unspecified
787.60	Full incontinence of feces
787.61	Incomplete defecation
787.62	Fecal smearing
787.63	Fecal urgency
787.91	Diarrhea
788.41-788.43	Frequency of urination and polyuria
789.1	Hepatomegaly
790.21-790.29	Abnormal glucose tolerance test
790.6	Other abnormal blood chemistry (hyperglycemia)
791.0	Proteinuria
791.5	Glycosuria
796.1	Abnormal reflex
799.4	Cachexia
V23.0-V23.3, V23.41-V23.49, V23.5, V23.7, V23.81- V23.85, V23.86, V23.89, V23.9	Supervision of high-risk pregnancy
V58.63-V58.65	Long-term (current) drug use
V58.67	Long-term (current) use of insulin
V58.69	Long term current use of other medication
V67.2	Follow-up examination, following chemotherapy
V67.51	Follow-up examination with high-risk medication not elsewhere classified
V77.1 Covered for procedure code 82947 only	Special screening for endocrine, nutrition, metabolic, & immunity disorders

Indications

Blood glucose values are often necessary for the management of patients with diabetes mellitus, where hyperglycemia and hypoglycemia are often present. They are also critical in the determination of control of blood glucose levels in patient with impaired fasting glucose (FPG 110-125 mg/dL), patient with insulin resistance syndrome and/or carbohydrate intolerance (excessive rise in glucose following ingestion of glucose/glucose sources of food), in patient with a hypoglycemia disorder such as nesidioblastosis or insulinoma, and in patients with a catabolic or malnutrition state. In addition to conditions listed, glucose testing may be medically necessary in patients with tuberculosis, unexplained chronic or recurrent infections, alcoholism, coronary artery disease (especially in women), or unexplained skin conditions (i.e.: pruritis, skin

NCD 190.20



infections, ulceration and gangrene without cause). Many medical conditions may be a consequence of a sustained elevated or depressed glucose level, including comas, seizures or epilepsy, confusion, abnormal hunger, abnormal weight loss or gain, and loss of sensation. Evaluation of glucose may be indicated in patients on medications known to affect carbohydrate metabolism.

Effective January 1, 2005, the Medicare law expanded coverage to diabetic screening services. Some forms of blood glucose testing covered under this NCD may be covered for screening purposes subject to specified frequencies. See 42 CFR410.18, sec. 90 ch.18 Claims Processing Manual for screening benefit description.

Limitations

Frequent home blood glucose testing by diabetic patients should be encouraged. In stable, non-hospitalized patients unable or unwilling to do home monitoring, it may necessary to measure quantitative blood glucose up to 4 times a year. Depending upon patient's age, type of diabetes, complications, degree of control, and other co-morbid conditions, more frequent testing than 4 times a year may be reasonable and necessary. In patients presenting nonspecific signs, symptoms, or diseases not normally associated with disturbances in glucose metabolism, a single blood glucose test may be medically necessary. Repeat testing may not be indicated unless abnormal results are found or there is a change in clinical condition. If repeat testing is performed, a diagnosis code (e.g., diabetes) should be reported to support medical necessity. However, repeat testing may be indicated where results are normal in patients with conditions of a continuing risk of glucose metabolism abnormality (e.g., monitoring glucocorticoid therapy).

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Documentation Requirements

The ordering physician must include evidence in the patient's clinical record that an evaluation of history and physical preceded the ordering of glucose testing and that manifestations of abnormal glucose levels were present to warrant the testing.

Sources of Information

AACE Guidelines for Management of Diabetes Mellitus, Endocrine Practice (1995)1:149-157. Bower, Bruce F. & Robert E. Moore, Endocrine Function and Carbohydrates. Clinical Laboratory Medicine, K. D. McClatchy, Baltimore/Williams & Wilkins, 1994. pp 321-323. Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus, Diabetes Care, Volume 20, Number 7, July 1997, pages 1183 et seq. Roberts, H. J., Difficulté Diagnoses. W. B. Saunders Co., pp 69-70.



190.21 - Glycated Hemoglobin/Glycated Protein

Previously Listed as Edit 10

Description

The management of diabetes mellitus requires regular determinations of blood glucose levels. Glycated hemoglobin/protein levels are used to assess long-term glucose control in diabetes. Alternative names for these tests include glycated or glycosylated hemoglobin or Hgb, hemoglobin glycated or glycosylated protein, and fructosamine.

Glycated hemoglobin (equivalent to hemoglobin A1) refers to total glycosylated hemoglobin present in erythrocytes, usually determined by affinity or ion-exchange chromatographic methodology. Hemoglobin A1c refers to the major component of hemoglobin A1, usually determined by ion-exchange affinity chromatography, immunoassay or agar gel electrophoresis. Fructosamine or glycated protein refers to glycosylated protein present in a serum or plasma sample. Glycated protein refers to measurement of the component of the specific protein that is glycated usually by colorimetric method or affinity chromatography.

Glycated hemoglobin in whole blood assesses glycemic control over a period of 4-8 weeks and appears to be the more appropriate test for monitoring a patient who is capable of maintaining long-term, stable control. Measurement may be medically necessary every 3 months to determine whether a patient's metabolic control has been on average within the target range. More frequent assessments, every 1-2 months, may be appropriate in the patient whose diabetes regimen has been altered to improve control or in whom evidence is present that intercurrent events may have altered a previously satisfactory level of control (for example, post-major surgery or as a result of glucocorticoid therapy). Glycated protein in serum/plasma assesses glycemic control over a period of 1-2 weeks. It may be reasonable and necessary to monitor glycated protein monthly in pregnant diabetic women. Glycated hemoglobin/protein test results may be low, indicating significant, persistent hypoglycemia, in nesidioblastosis or insulinoma, conditions which are accompanied by inappropriate hyperinsulinemia. A below normal test value is helpful in establishing the patient's hypoglycemic state in those conditions.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82985	Glycated protein
83036	Hemoglobin; glycated

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
211.7	Benign neoplasm of islets of Langerhans
249.00-249.01	Secondary diabetes mellitus without mention of complication
249.10-249.11	Secondary diabetes mellitus with ketoacidosis

NCD 190.21



Code	Description
249.20-249.21	Secondary diabetes mellitus with hyperosmolarity
249.30-249.31	Secondary diabetes mellitus with other coma
249.40-249.41	Secondary diabetes mellitus with renal manifestations
249.50-249.51	Secondary diabetes mellitus with ophthalmic manifestations
249.60-249.61	Secondary diabetes mellitus with neurological manifestations
249.70-249.71	Secondary diabetes mellitus with peripheral circulatory disorders
249.80-249.81	Secondary diabetes mellitus with other specified manifestations
249.90-249.91	Secondary diabetes mellitus with unspecified complication
250.00-250.93	Diabetes mellitus & various related codes
251.0	Hypoglycemic coma
251.1	Other specified hypoglycemia
251.2	Hypoglycemia unspecified
251.3	Post-surgical hypoinsulinemia
251.4	Abnormality of secretion of glucagon
251.8	Other specified disorders of pancreatic internal secretion
251.9	Unspecified disorder of pancreatic internal secretion
258.0-258.9	Polyglandular dysfunction and related disorders
271.4	Renal glycosuria
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
577.1	Chronic pancreatitis
579.3	Other and unspecified postsurgical nonabsorption
648.00	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, unspecified as to episode of care or not applicable
648.03	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, antepartum condition or complication
648.04	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, postpartum condition or complication
648.80	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, unspecified as to episode of care or not applicable
648.83	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, antepartum condition or complication
648.84	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, postpartum condition or complication
790.21-790.29	Abnormal glucose tolerance test
790.6	Other abnormal blood chemistry (hyperglycemia)
962.3	Poisoning by insulin and antidiabetic agents
V12.2	Personal history of endocrine, metabolic, and immunity disorders
V58.67	Long-term (current) use of insulin
V58.69	Long-term use of other medication

NCD 190.21



Indications

Glycated hemoglobin/protein testing is accepted as medically necessary for management and control of diabetes and to assess hyperglycemia, a history of hyperglycemia or dangerous hypoglycemia. Glycated protein testing may be used in place of glycated hemoglobin in the management of diabetic patients, and is useful in patients with abnormalities of erythrocytes such as hemolytic anemia or hemoglobinopathies.

Limitations

It is not reasonable and necessary to perform glycated hemoglobin tests more often than every three months on a controlled diabetic patient to determine if the patient's metabolic control has been on average within the target range. It is not reasonable and necessary for these tests to be performed more frequently than once a month for diabetic pregnant women. Testing for uncontrolled type one or two diabetes mellitus may require testing more than four times a year. The above Description Section provides the clinical basis for those situations in which testing more frequently than four times per annum is indicated, and medical necessity documentation must support such testing in excess of the above guidelines.

Many analytical methods of glycated hemoglobin show interference from elevated levels of fetal hemoglobin or by variant hemoglobin molecules. When the glycated hemoglobin assay is initially performed in these patients, the laboratory may inform the ordering physician of a possible analytical interference. Alternative testing, including glycated protein, for example, fructosamine, may be indicated for monitoring the degree of glycemic control. It is therefore conceivable that a patient will have both a glycated hemoglobin and glycated protein ordered on the same day. This should be limited to the initial assay of glycated hemoglobin, with subsequent exclusive use of glycated protein. These tests are not considered to be medically necessary for the diagnosis of diabetes.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Bower, Bruce F. and Robert Moore, Endocrine Function and Carbohydrates. Clinical Laboratory Medicine, Kenneth D. McClatchy, editor. Baltimore/Williams & Wilkins, 1994. pp. 321-323.

Tests of Glycemia in Diabetes. Diabetes Care. 1/98, 21:Supp. 1:S69-S71.American Association of Clinical Endocrinologists Guidelines for Management of Diabetes Mellitus

Dons, Robert F, Endocrine & Metabolic Testing Manual, 3rd Edition. Expert Committee on Glycated Hgb. Diabetes Care, 11/84, 7:6:602-606. Evaluation of Glycated Hgb in Diabetes, Diabetes. 7/91 30:613-617.

Foster, Daniel W., Diabetes Mellitus, Harrison's Principles of Internal Medicine. 13th ed., Kurt J. Isselbacher et al. Editors, New York/McGraw-Hill, 1994, pg. 1990.

Management of Diabetes in Older Patients. Practical Therapeutics. 1991, Drugs 41:4:548-565.

Koch, D. D. Fructosamine: How Useful Is It? Laboratory Medicine, V. 21, N. 8, August 1990, pp. 497-503.

Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus, Diabetes Care, Volume 20, Number 7, July 1997, pp. 1183 et seq.

Sacks, David B., Carbohydrates. In Tietz Textbook of Clinical Chemistry, 2nd Ed., Carl A. Burtis and Edward R. Ashwood, editors. Philadelphia, W.B. Saunders Co., 1994. pp. 980-988.

Tests of Glycemia in Diabetes, American Diabetes Association, Diabetes Care, Volume 20, Supplement I, January 1997, pp. 518-520.



190.22 - Thyroid Testing

Previously Listed as Edit 11

Description

Thyroid function studies are used to delineate the presence or absence of hormonal abnormalities of the thyroid and pituitary glands. These abnormalities may be either primary or secondary and often but not always accompany clinically defined signs and symptoms indicative of thyroid dysfunction.

Laboratory evaluation of thyroid function has become more scientifically defined. Tests can be done with increased specificity, thereby reducing the number of tests needed to diagnose and follow treatment of most thyroid disease. Measurements of serum sensitive thyroid-stimulating hormone (TSH) levels, complemented by determination of thyroid hormone levels [free thyroxine (fT-4) or total thyroxine (T4) with Triiodothyronine (T3) uptake] are used for diagnosis and follow-up of patients with thyroid disorders. Additional tests may be necessary to evaluate certain complex diagnostic problems or on hospitalized patients, where many circumstances can skew tests results. When a test for total thyroxine (total T4 or T4 radioimmunoassay) or T3 uptake is performed, calculation of the free thyroxine index (FTI) is useful to correct for abnormal results for either total T4 or T3 uptake due to protein binding effects.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
84436	Thyroxine; total
84439	Thyroxine; free
84443	Thyroid stimulating hormone (TSH)
84479	Thyroid hormone (T3 or T4) uptake or thyroid hormone binding ratio (THBR)

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
017.50-017.56	Tuberculosis of the thyroid gland
183.0	Malignant neoplasm of ovary
193	Malignant neoplasm of thyroid gland
194.8	Malignant neoplasm of other endocrine glands and related structures
198.89	Secondary malignant neoplasm of the thyroid
220	Benign neoplasm of ovary
226	Benign neoplasm of thyroid gland
227.3	Benign neoplasm of pituitary gland and craniopharyngeal duct
234.8	Carcinoma in situ of other and unspecified sites



Code	Description
237.4	Neoplasm of uncertain behavior of other and unspecified endocrine glands
239.7	Neoplasm of unspecified nature, thyroid gland
240.0-240.9	Goiter specified and unspecified
241.0-241.9	Nontoxic nodular goiter
242.00-242.91	Thyrotoxicosis with or without goiter
243	Congenital hypothyroidism
244.0-244.9	Acquired hypothyroidism
245.0-245.9	Thyroiditis
246.0-246.9	Other disorders of thyroid
249.00-249.01	Secondary diabetes mellitus without mention of complication
249.10-249.11	Secondary diabetes mellitus with ketoacidosis
249.20-249.21	Secondary diabetes mellitus with hyperosmolarity
249.30-249.31	Secondary diabetes mellitus with other coma
249.40-249.41	Secondary diabetes mellitus with renal manifestations
249.50-249.51	Secondary diabetes mellitus with ophthalmic manifestations
249.60-249.61	Secondary diabetes mellitus with neurological manifestations
249.70-249.71	Secondary diabetes mellitus with peripheral circulatory disorders
249.80-249.81	Secondary diabetes mellitus with other specified manifestations
249.90-249.91	Secondary diabetes mellitus with unspecified complication
250.00-250.93	Diabetes mellitus
252.1	Hypoparathyroidism
253.1	Other and unspecified anterior pituitary hyper function
253.2	Panhypopituitarism
253.3	Pituitary dwarfism
253.4	Other anterior pituitary disorders
253.7	latrogenic pituitary disorders
255.2	Adrenogenital disorders
255.41	Glucocorticoid deficiency
255.42	Mineralocorticoid deficiency
256.31-256.39	Ovarian failure
257.2	Testicular hypofunction
258.0 – 258.9	Polyglandular dysfunction and related disorders
262	Malnutrition, severe
263.0-263.9	Malnutrition, other and unspecified
266.0	Ariboflavinosis
272.0	Pure hypercholesterolemia
272.2	Mixed hyperlipidemia
272.4	Other and unspecified hyperlipidemia
275.40-275.49	Calcium disorders
275.5	Hungry bone syndrome

NCD 190.22



Code	Description
276.0	Hyposmolality and/or hypernatremia
276.1	Hyposmolality and/or hyponatremia
278.3	Hypercarotenemia
279.41	Autoimmune lymphoproliferative syndrome
279.49	Autoimmune disease, not elsewhere classified
281.0	Pernicious anemia
281.9	Unspecified deficiency anemia
283.0	Autoimmune hemolytic anemia
285.9	Anemia, unspecified
290.0	Senile dementia, uncomplicated
290.10-290.13	Presenile dementia
290.20-290.21	Senile dementia with delusional or depressive features
290.3	Senile dementia with delirium
293.0-293.1	Delirium
293.81-293.89	Other specified transient mental disorders due to conditions classified elsewhere
294.8	Other persistent mental disorders due to conditions classified elsewhere
296.00-296.99	Episodic mood disorders
297.0	Paranoid state, simple
297.1	Delusional disorder
297.9	Unspecified paranoid state
298.3	Acute paranoid reaction
300.00-300.09	Anxiety states
307.9	Other and unspecified special symptoms or syndromes NEC
310.1	Personality change due to conditions classified elsewhere
311	Depressive disorder, NEC
327.00	Organic insomnia, unspecified
327.01	Insomnia due to medical condition classified elsewhere
327.09	Other organic insomnia
327.29	Other organic sleep apnea
327.52	Sleep related leg cramps
327.8	Other Organic sleep disorders
331.0, 331.11, 331.19, 331.2	Alzheimer's, pick's disease, Senile degeneration of brain
331.83	Mild cognitive impairment, so stated
333.1	Essential and other specified forms of tremor
333.99	Other extrapyramidal diseases and abnormal movement disorders
354.0	Carpal Tunnel syndrome
356.9	Idiopathic peripheral neuropathy, unspecified polyneuropathy
358.1	Myasthenic syndromes in diseases classified elsewhere
359.5	Myopathy in endocrine diseases classified elsewhere

NCD 190.22



Code	Description
359.9	Myopathy, unspecified
368.2	Diplopia
372.71	Conjunctival hyperemia
372.73	Conjunctival edema
374.41	Lid retraction or lag
374.82	Eyelid edema
376.21	Thyrotoxic exophthalmos
376.22	Exophthalmic ophthalmoplegia
376.30-376.31	Exophthalmic conditions, unspecified and constant
376.33-376.34	Orbital edema or congestion, intermittent exophthalmos
378.50-378.55	Paralytic strabismus
401.0-401.9	Essential hypertension
403.00-403.91	Hypertensive chronic kidney disease
404.00-404.93	Hypertensive heart and chronic kidney disease
423.9	Unspecified disease of pericardium
425.7	Nutritional and metabolic cardiomyopathy
427.0	Paroxysmal supraventricular tachycardia
427.2	Paroxysmal tachycardia, unspecified
427.31	Atrial fibrillation
427.89	Other specified cardiac dysrhythmia
427.9	Cardiac dysrhythmia, unspecified
428.0	Congestive heart failure, unspecified
428.1	Left heart failure
429.3	Cardiomegaly
511.9	Unspecified pleural effusion
518.81	Acute respiratory failure
529.8	Other specified conditions of the tongue
560.1	Paralytic ileus
564.00-564.09	Constipation
564.7	Megacolon, other than Hirschsprung's
568.82	Peritoneal effusion (chronic)
625.3	Dysmenorrhea
626.0-626.2	Disorders of menstruation
626.4	Irregular menstrual cycle
648.10-648.14	Other current conditions in mother, classifiable elsewhere, but complicating pregnancy, childbirth, or puerperium, thyroid dysfunction
676.20-676.24	Engorgement of breast associated w/ childbirth & disorders of lactation
698.9	Unspecified pruritic disorder
701.1	Keratoderma, acquired (dry skin)
703.8	Other specified diseases of nail (Brittle nails)
704.00-704.09	Alopecia
104.00-104.08	Viohena

NCD 190.22



Code	Description
709.01	Vitiligo
710.0-710.9	Diffuse disease of connective tissue
728.2	Muscle wasting
728.87	Muscle weakness (generalized)
728.9	Unspecified disorder of muscle, ligament, and fascia
729.1	Myalgia and myositis, unspecified
729.82	Musculoskeletal cramp
730.30-730.39	Periostitis without osteomyelitis
733.02	Idiopathic osteoporosis
733.09	Osteoporosis, drug induced
750.15	Macroglossia, congenital
759.2	Anomaly of other endocrine glands
780.01	Coma
780.02	Transient alteration of awareness
780.09	Alteration of consciousness, other
780.50	Insomnia
780.51	Insomnia with sleep apnea, unspecified
780.52	Insomnia, unspecified
780.60	Fever, unspecified
780.61	Fever presenting with conditions classified elsewhere
780.62	Postprocedural fever
780.63	Postvaccination fever
780.64	Chills (without fever)
780.65	Hypothermia not associated with low environmental temperature
780.66	Febrile nonhemolytic transfusion reaction
780.71	Chronic fatigue syndrome
780.72	Functional quadriplegia
780.79	Other malaise and fatigue
780.8	Generalized hyperhidrosis
780.93	Memory loss
780.94	Early satiety
780.96	Generalized pain
780.97	Altered mental status
780.99	Other general symptoms
781.0	Abnormal involuntary movements
781.3	Lack of coordination, ataxia
782.0	Disturbance of skin sensation
782.3	Localized edema
782.8	Changes in skin texture
782.9	Other symptoms involving skin and integumentary tissues
783.0	Anorexia

NCD 190.22



Code	Description
783.1	Abnormal weight gain
783.21	Abnormal loss of weight
783.6	Polyphagia
784.1	Throat pain
784.42	Dysphonia
784.43	Hypernasality
784.44	Hyponasality
784.49	Other voice and resonance disorders
784.51	Dysarthria
784.59	Other speech disturbance
785.0	Tachycardia, unspecified
785.1	Palpitations
785.9	Other symptoms involving cardiovascular system
786.09	Other symptoms involving respiratory system
786.1	Stridor
787.20	Dysphagia, unspecified
787.21	Dysphagia, oral phase
787.22	Dysphagia, oropharyngeal phase
787.23	Dysphagia, pharyngeal phase
787.24	Dysphagia, pharyngo-esophageal phase
787.29	Other dysphagia
787.91-787.99	Other symptoms involving digestive system
789.51	Malignant Ascites
789.59	Other Ascites
793.99	Other nonspecific (abnormal) findings on radiological and other examination of body structure
794.5	Thyroid, abnormal scan or uptake
796.1	Other nonspecific abnormal findings, abnormal reflex
799.21	Nervousness
799.22	Irritability
799.23	Impulsiveness
799.24	Emotional lability
799.25	Demoralization and apathy
799.29	Other signs and symptoms involving emotional state
990	Effects of radiation, unspecified
V10.87	Personal history of malignant neoplasm of the thyroid
V10.88	Personal history of malignant neoplasm of other endocrine gland
V10.91	Personal history of malignant neuroendocrine tumor
V12.2	Personal history of endocrine, metabolic and immunity disorders
V58.69	Long term (current) use of other medications
V67.00-V67.9	Follow-up examination

NCD 190.22



Indications

Thyroid function tests are used to define hyper function, euthyroidism, or hypofunction of thyroid disease. Thyroid testing may be reasonable and necessary to:

- Distinguish between primary and secondary hypothyroidism
- Confirm or rule out primary hypothyroidism
- Monitor thyroid hormone levels (for example, patients with goiter, thyroid nodules, or thyroid cancer)
- Monitor drug therapy in patients with primary hypothyroidism
- Confirm or rule out primary hyperthyroidism
- Monitor therapy in patients with hyperthyroidism

Thyroid function testing may be medically necessary in patients with disease or neoplasm of the thyroid and other endocrine glands. Thyroid function testing may also be medically necessary in patients with metabolic disorders; malnutrition; hyperlipidemia; certain types of anemia; psychosis and non-psychotic personality disorders; unexplained depression; ophthalmologic disorders; various cardiac arrhythmias; disorders of menstruation; skin conditions; myalgias; and a wide array of signs and symptoms, including alterations in consciousness; malaise; hypothermia; symptoms of the nervous and musculoskeletal system; skin and integumentary system; nutrition and metabolism; cardiovascular; and gastrointestinal system.

It may be medically necessary to do follow-up thyroid testing in patients with a history of malignant neoplasm of the endocrine system and in patients on long-term thyroid drug therapy.

Limitations

Testing may be covered up to two times a year in clinically stable patients; more frequent testing may be reasonable and necessary for patients whose thyroid therapy has been altered or in whom symptoms or signs of hyperthyroidism or hypothyroidism are noted.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Documentation Requirements

When these tests are billed at a greater frequency than the norm (two per year), the ordering physician's documentation must support the medical necessity of this frequency.

Sources of Information

AACE Clinical Practice Guidelines for the Diagnosis and Management of Thyroid Nodules, Endocrine Practice (1996) 2:1, pp. 78-84.

AACE Clinical Practice Guidelines for Evaluation and Treatment of Hyperthyroidism and Hypothyroidism, Endocrine Practice (1995) 1:1, pp. 54-62.

AACE Clinical Practice Guidelines for Management of Thyroid Carcinoma, Endocrine Practice (1997) 3:1, pp. 60-71.

Cooper DS. Treatment of thyrotoxicosis. In Braverman LE, Utiger RD, eds. Werner and Ingbar's The Thyroid: A Fundamental and Clinical Text. 6th ed. Philadelphia, Pa: JB Lippincott Co; 1991:887-916.

Endocrinology. DeGroot LJ, et. al. Eds. 3rd ed. Philadelphia, Pa: W.B.Saunders Co.; 1995.

Endocrinology and Metabolism. Felig, P, Baxter, JD, Frohman, LA, eds.3rd ed. McGraw-Hill, Inc.: 1995.



Franklyn JA. The Management of Hyperthyroidism. N Engl J Med. 1994; 330(24):1731-1738.

Glenn GC and the Laboratory Testing Strategy Task Force of the College of American Pathologists. Practice parameter on laboratory panel testing for screening and case finding in asymptomatic adults. Arch Pathol LabMed. 1996:120:929-43.

Larsen PR, Ingbar SH. The Thyroid Gland. In: Wilson JD, Foster DW, eds. Williams Textbook of Endocrinology. 9th ed. Philadelphia, Pa: WB Saunders Co; 1992:357-487. The Merck Manual, 16th Edition, pp. 1072-1081.



190.23 - Lipids Testing

Previously Listed as Edit 12

Description

Lipoproteins are a class of heterogeneous particles of varying sizes and densities containing lipid and protein. These lipoproteins include cholesterol esters and free cholesterol, triglycerides, phospholipids and A, C, and E apoproteins. Total cholesterol comprises all the cholesterol found in various lipoproteins.

Factors that affect blood cholesterol levels include age, sex, body weight, diet, alcohol and tobacco use, exercise, genetic factors, family history, medications, menopausal status, the use of hormone replacement therapy, and chronic disorders such as hypothyroidism, obstructive liver disease, pancreatic disease (including diabetes), and kidney disease.

In many individuals, an elevated blood cholesterol level constitutes an increased risk of developing coronary artery disease. Blood levels of total cholesterol and various fractions of cholesterol, especially low density lipoprotein cholesterol (LDL -C) and high density lipoprotein cholesterol (HDL-C) are useful in assessing and monitoring treatment for that risk in patients with cardiovascular and related diseases. Blood levels of the above cholesterol components including triglyceride have been separated into desirable, borderline and high-risk categories by the National Heart, Lung, and Blood Institute in their report in 1993. These categories form a useful basis for evaluation and treatment of patients with hyperlipidemia. Therapy to reduce these risk parameters includes diet, exercise and medication, and fat weight loss, which is particularly powerful when combined with diet and exercise.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
80061	Lipid panel
82465	Cholesterol, serum or whole blood, total
83700	Lipoprotein, blood; electrophoretic separation and quantitation
83701	Lipoprotein blood; high resolution fractionation and quantitation of lipoproteins including lipoprotein subclasses when performed (e.g., electrophoresis, ultracentrifugation)
83704	Lipoprotein, blood; quantitation of lipoprotein particle numbers and lipoprotein particle subclasses
83718	Lipoprotein, direct measurement; high density cholesterol (HDL cholesterol)
83721	Lipoprotein, direct measurement, LDL cholesterol
84478	Triglycerides



ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
242.00-245.9	Disorders of the thyroid gland with hormonal dysfunction
249.00-249.01	Secondary diabetes mellitus without mention of complication
249.10-249.11	Secondary diabetes mellitus with ketoacidosis
249.20-249.21	Secondary diabetes mellitus with hyperosmolarity
249.30-249.31	Secondary diabetes mellitus with other coma
249.40-249.41	Secondary diabetes mellitus with renal manifestations
249.50-249.51	Secondary diabetes mellitus with ophthalmic manifestations
249.60-249.61	Secondary diabetes mellitus with neurological manifestations
249.70-249.71	Secondary diabetes mellitus with peripheral circulatory disorders
249.80-249.81	Secondary diabetes mellitus with other specified manifestations
249.90-249.91	Secondary diabetes mellitus with unspecified complication
250.00-250.93	Diabetes mellitus
255.0	Cushing's syndrome
260	Kwashiorkor
261	Nutritional marasmus
262	Other severe, protein-calorie malnutrition
263.0	Malnutrition of moderate degree
263.1	Malnutrition of mild degree
263.8	Other protein-calorie malnutrition
263.9	Unspecified protein-calorie malnutrition
270.0	Disturbances of amino-acid transport
271.1	Galactosemia
272.0	Pure hypercholesterolemia
272.1	Hypertriglyceridemia
272.2	Mixed hyperlipidemia (tuberous xanthoma)
272.3	Hyperchylomicronemia
272.4	Other and unspecified hyperlipidemia (unspecified xanthoma)
272.5	Lipoprotein deficiencies
272.6	Lipodystrophy
272.7	Lipidoses
272.8	Other disorders of lipoid metabolism
272.9	Unspecified disorders of lipoid metabolism
277.30	Amyloidosis, unspecified
277.31	Familial Mediterranean fever
277.39	Other amyloidosis
278.00	Obesity

NCD 190.23



Code	Description
278.01	Morbid obesity
278.02	Overweight
278.03	Obesity hypoventilation syndrome
303.90-303.92	Alcoholism
362.10-362.16	Other background retinopathy and retinal vascular change
362.30-362.34	Retinal vascular occlusion
362.82	Retinal exudates and deposits
371.41	Senile corneal changes
374.51	Xanthelasma
379.22	Crystalline deposits in vitreous
388.00	Degenerative & vascular disorder of ear, unspecified
388.02	Transient ischemic deafness
401.0, 401.1, 401.9	Essential hypertension
402.00-402.91	Hypertensive heart disease
403.00-403.91	Hypertensive chronic kidney disease
404.00-404.93	Hypertensive heart and chronic kidney disease
405.01-405.99	Secondary hypertension
410.00-410.92	Acute myocardial infarction
411.0-411.1	Other acute & subacute forms of ischemic heart disease
411.81	Coronary occlusion without myocardial infarction
411.89	Other acute and subacute ischemic heart disease
412	Old myocardial infarction
413.0-413.1	Angina pectoris
413.9	Other and unspecified angina pectoris
414.00-414.03	Coronary atherosclerosis
414.04	Coronary atherosclerosis, of artery bypass graft
414.05	Coronary atherosclerosis, of unspecified graft
414.06	Coronary atherosclerosis, of coronary artery of transplanted heart
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart
414.10	Aneurysm of heart (wall)
414.11	Coronary vessel aneurysm
414.12	Dissection of coronary artery
414.19	Other aneurysm of heart
414.3	Coronary atherosclerosis due to lipid rich plaque
414.8	Other specified forms of chronic ischemic heart disease
414.9	Chronic ischemic heart disease, unspecified
428.0-428.9	Heart failure
429.2	Heart disease, unspecified
429.9	Heart disease NOS
431	Intracerebral hemorrhage

NCD 190.23



Code	Description
433.00-433.91	Occlusion & stenosis of precerebral arteries
434.00-434.91	Occlusion of cerebral arteries
435.0-435.9	Transient cerebral ischemia
437.0	Cerebral atherosclerosis
437.1	Other generalized ischemic cerebrovascular disease
437.5	Moyamoya disease
438.0, 438.10-438.14, 438.19, 438.20-438.22, 438.30-438.32, 438.40- 438.42, 438.50-438.53, 438.6, 438.7, 438.81-438.85, 438.89, 438.9	Late effects of cerebrovascular disease
440.0-440.32	Atherosclerosis of aorta; of other arteries; of bypass grafts
440.4	Chronic total occlusion of the artery of the extremities
440.8-440.9	Atherosclerosis of other specified arteries; generalized and unspecified atherosclerosis
441.00-441.9	Aortic aneurysms and dissection
442.0	Upper extremity aneurysm
442.1	Renal artery aneurysm
442.2	Iliac artery aneurysm
444.0-444.9	Arterial embolism & thrombosis
557.1	Chronic vascular insufficiency of intestine
571.8	Other chronic non-alcoholic liver disease
571.9	Unspecified chronic liver disease without mention of alcohol
573.8	Other specified disorders of liver
573.9	Unspecified disorders of liver
577.0-577.9	Pancreatic disease
579.3	Other & unspecified postsurgical nonabsorption
579.8	Other specified intestinal malabsorption
581.0-581.9	Nephrotic syndrome
584.5	Acute kidney failure with lesion of tubular necrosis
585.4 – 585.9	Chronic kidney disease
588.0	Renal osteodystrophy
588.1	Nephrogenic diabetes insipidus
588.81	Secondary hyperparathyroidism (of renal origin)
588.89	Other specified disorders resulting from impaired renal function
588.9	Unspecified disorder resulting from impaired renal function
607.84	Impotence of organic origin, penis disorder
646.70-646.71	Liver disorders in pregnancy
646.73	Liver disorder antepartum
648.10-648.14	Thyroid dysfunction in pregnancy and the puerperium

NCD 190.23



Code	Description
696.0	Psoriatic arthropathy
696.1	Other psoriasis
751.61	Biliary atresia
764.10-764.19	"Light for dates" with signs of fetal malnutrition
786.50	Chest pain unspecified
786.51	Precordial pain
786.59	Chest pain, other
789.1	Hepatomegaly
790.4	Abnormal transaminase
790.5	Abnormal alkaline phosphatase
790.6	Other abnormal blood chemistry
793.4	Nonspecific (abnormal) findings on radiological and other examination of gastrointestinal tract
987.9	Toxic effect of unspecified gas or vapor
996.81	Complication of transplanted organ, kidney
V42.0	Transplanted organ, kidney
V42.7	Organ replacement by transplant, liver
V58.63-V58.64	Long-term (current) drug use
V58.69	Long term (current) use of other medications
V81.0-V81.2 Covered only for procedure codes 80061, 82465, 83718 & 84478.	Special screening for cardiovascular, respiratory, and genitourinary diseases

Indications

The medical community recognizes lipid testing as appropriate for evaluating atherosclerotic cardiovascular disease. Conditions in which lipid testing may be indicated include:

- Assessment of patients with atherosclerotic cardiovascular disease
- Evaluation of primary dyslipidemia
- Any form of atherosclerotic disease, or any disease leading to the formation of atherosclerotic disease
- Diagnostic evaluation of diseases associated with altered lipid metabolism, such as: nephrotic syndrome, pancreatitis, hepatic disease, and hypo and hyporthyroidism
- Secondary dyslipidemia, including diabetes mellitus, disorders of gastrointestinal absorption, chronic renal failure
- Signs or symptoms of dyslipidemias, such as skin lesions
- As follow-up to the initial screen for coronary heart disease (total cholesterol + HDL cholesterol) when total cholesterol is determined to be high (>240 mg/dL), or borderline-high (200-240 mg/dL) plus two or more coronary heart disease risk factors, or an HDL cholesterol <35 mg/dL.



To monitor the progress of patients on anti-lipid dietary management and pharmacologic therapy for the treatment of elevated blood lipid disorders, total cholesterol, HDL cholesterol and LDL cholesterol may be used. Triglycerides may be obtained if this lipid fraction is also elevated or if the patient is put on drugs (for example, thiazide diuretics, beta blockers, estrogens, glucocorticoids, and tamoxifen) which may raise the triglyceride level.

When monitoring long-term anti-lipid dietary or pharmacologic therapy and when following patients with borderline high total or LDL cholesterol levels, it may be reasonable to perform the lipid panel annually. A lipid panel at a yearly interval will usually be adequate while measurement of the serum total cholesterol or a measured LDL should suffice for interim visits if the patient does not have hypertriglyceridemia.

Any one component of the panel or a measured LDL may be reasonable and necessary up to six times the first year for monitoring dietary or pharmacologic therapy. More frequent total cholesterol HDL cholesterol, LDL cholesterol and triglyceride testing may be indicated for marked elevations or for changes to anti-lipid therapy due to inadequate initial patient response to dietary or pharmacologic therapy. The LDL cholesterol or total cholesterol may be measured three times yearly after treatment goals have been achieved.

Electrophoretic or other quantitation of lipoproteins may be indicated if the patient has a primary disorder of lipoid metabolism.

Effective January 1, 2005, the Medicare law expanded coverage to cardiovascular screening services. Several of the procedures included in this NCD may be covered for screening purposes subject to specified frequencies. See 42 CFR 410.17 and section 100, chapter 18, of the Claims Processing Manual, for a full description of this benefit.

Limitations

Lipid panel and hepatic panel testing may be used for patients with severe psoriasis which has not responded to conventional therapy and for which the retinoid etretinate has been prescribed and who have developed hyperlipidemia or hepatic toxicity. Specific examples include erythrodermia and generalized pustular type and psoriasis associated with arthritis. Routine screening and prophylactic testing for lipid disorder are not covered by Medicare. While lipid screening may be medically appropriate, Medicare by statute does not pay for it. Lipid testing in asymptomatic individuals is considered to be screening regardless of the presence of other risk factors such as family history, tobacco use, etc.

Once a diagnosis is established, one or several specific tests are usually adequate for monitoring the course of the disease. Less specific diagnoses (for example, other chest pain) alone do not support medical necessity of these tests.

When monitoring long-term anti-lipid dietary or pharmacologic therapy and when following patients with borderline high total or LDL cholesterol levels, it is reasonable to perform the lipid panel annually. A lipid panel at a yearly interval will usually be adequate while measurement of the serum total cholesterol or a measured LDL should suffice for interim visits if the patient does not have hypertriglyceridemia.

Any one component of the panel or a measured LDL may be medically necessary up to six times the first year for monitoring dietary or pharmacologic therapy. More frequent total cholesterol HDL cholesterol, LDL cholesterol and triglyceride testing may be indicated for marked elevations or for changes to anti-lipid therapy due to inadequate initial patient response



to dietary or pharmacologic therapy. The LDL cholesterol or total cholesterol may be measured three times yearly after treatment goals have been achieved.

If no dietary or pharmacological therapy is advised, monitoring is not necessary.

When evaluating non-specific chronic abnormalities of the liver (for example, elevations of transaminase, alkaline phosphatase, abnormal imaging studies, etc.), a lipid panel would generally not be indicated more than twice per year.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

American Diabetes Association. Management of Dyslipidemia in Adults with Diabetes. J. Florida M.A. 1998, 85:2 30-34.

Jialal, I. Evolving lipoprotein risk factors: lipoprotein (a) and oxidizing low-density lipoprotein. Clin Chem 1998; 44:8(B) 1827-1832.

McMorrow, ME, Malarkey, L. Laboratory and Diagnostic Tests: A Pocket Guide. W.B. Saunders Company. 206-207.

U.S. Department of Health and Human Services. National Cholesterol Education Program. Recommendations for Improving Cholesterol Measurement. NIH Publication 90-2964. February 1990.

National Institutes of Health. Second Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. NIH Publication 93-3095. September 1993.

Bierman EL. Atherosclerosis and other forms of arteriosclerosis. Harrison's Principles of Internal Medicine. Eds. Isselbacher KJ, Braunwald E, Wilson JD, et al. McGraw-Hill. New York. 1994; 2058-2069.

Brown MS and Goldstein JL. The hyperlipoproteinemias and other disorders of lipid metabolism. Harrison's Principles of Internal Medicine. Eds. Isselbacher KJ, Braunwald E, Wilson JD, et al. McGraw-Hill. New York. 1994; 1106-1116.



190.24 - Digoxin Therapeutic Drug Assay

Previously Listed as Edit 13

Description

A digoxin therapeutic drug assay is useful for diagnosis and prevention of digoxin toxicity, and/or prevention for under dosage of digoxin.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
80162	Digoxin (Therapeutic Drug Assay)

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
242.00-242.91	Thyrotoxicosis with or without goiter
243	Congenital hypothyroidism
244.0-244.9	Acquired hypothyroidism
245.0-245.9	Thyroiditis
275.2	Disorders of magnesium metabolism
275.40-275.49	Disorders of calcium metabolism
275.5	Hungry bone syndrome
276.0	Hyperosmolality
276.1	Hyposmolality
276.2	Acidosis
276.3	Alkalosis
276.4	Mixed acid-base balance disorder
276.50-276.52	Volume depletion
276.61	Transfusion associated circulatory overload
276.69	Other fluid overload
276.7	Hyperpotassemia
276.8	Hypopotassemia
276.9	Electrolyte and fluid disorders not elsewhere classified
293.0	Delirium due to conditions classified elsewhere
293.1	Subacute delirium
307.47	Other dysfunctions of sleep stages or arousal from sleep
339.3	Drug induced headache, not elsewhere classified
368.16	Psychophysical visual disturbances
368.8	Other specified visual disturbances

NCD 190.24



Code	Description
368.9	Unspecified visual disturbances
397.9	Rheumatic diseases of endocardium
398.0	Rheumatic Myocarditis
398.91	Rheumatic Heart Failure
402.01	Hypertensive heart disease, malignant with heart failure
402.11	Hypertensive heart disease, benign with heart failure
402.91	Hypertensive heart disease, unspecified with heart failure
403.00-403.91	Hypertensive chronic kidney disease
404.00-404.93	Hypertensive heart and chronic kidney disease
410.00-410.92	Acute myocardial infarction
411.0-411.89	Other acute & subacute forms of ischemic heart disease
413.0-413.9	Angina pectoris
422.0-422.99	Acute myocarditis
425.0-425.9	Cardiomyopathy
426.0-426.9	Conduction disorders
427.0-427.9	Cardiac dysrhythmias
428.0-428.9	Heart failure
429.2	Cardiovascular disease, unspecified
429.4	Heart Disturbances Postcardiac Surgery
429.5	Rupture chordae tendineae
429.6	Rupture papillary muscle
429.71	Acquired cardiac septal defect
514	Pulmonary congestion & hypostasis
579.9	Unspecified Intestinal malabsorption
584.5	Acute kidney failure with lesion of tubular necrosis
584.6	Acute kidney failure with lesion of renal cortical necrosis
584.7	Acute kidney failure with lesion of renal medullary (papillary) necrosis
584.8	Acute kidney failure with other specified pathological lesion in kidney
584.9	Acute kidney failure, unspecified
585.1-585.9	Chronic kidney disease
586	Renal Failure, unspecified
587	Renal sclerosis, unspecified
588.0	Renal osteodystrophy
588.1	Nephrogenic Diabetes Insipidus
588.81	Secondary hyperparathyroidism (of renal origin)
588.89	Other specified disorders resulting from impaired renal function
588.9	Unspecified disorder resulting from impaired renal function
780.01	Coma
780.02	Transient alteration of awareness
780.09	Other ill-defined general symptoms (drowsiness, semicoma, somnolence, stupor, unconsciousness)

NCD 190.24



Code	Description
780.1	Hallucinations
780.2	Syncope and collapse
780.4	Dizziness and giddiness
780.71	Malaise and fatigue
780.72	Functional quadriplegia
780.79	Other malaise and fatigue
783.0	Anorexia
784.0	Headache
787.01-787.03	Nausea & vomiting
787.04	Bilious emesis
787.91	Diarrhea
794.31	Abnormal electrocardiogram
799.21	Nervousness
799.22	Irritability
799.23	Impulsiveness
799.24	Emotional lability
799.25	Demoralization and apathy
799.29	Other signs and symptoms involving emotional state
972.0	Poisoning by cardiac rhythm regulators
972.1	Poisoning by cardiotonic glycosides & drugs of similar action
995.20	Unspecified adverse effect of unspecified drug, medicinal and biological substance
995.21	Arthus phenomenon
995.24	Failed moderate sedation during procedure
995.27	Other drug allergy
995.29	Unspecified adverse effect of other drug, medicinal & biological substance
*E942.1	Adverse effect of cardiotonic glycosides and drugs of similar action
V58.69	Encounter long term - medication use (not elsewhere classified)
*Code may not be report	ted as a stand-alone or first-listed code on the claim

Indications

Digoxin levels may be performed to monitor drug levels of individuals receiving digoxin therapy because the margin of safety between side effects and toxicity is narrow or because the blood level may not be high enough to achieve the desired clinical effect.

Clinical indications may include individuals on digoxin:

- With symptoms, signs or electrocardiogram (ECG) suggestive of digoxin toxicity
- Taking medications that influence absorption, bioavailability, distribution, and/or elimination of digoxin
- With impaired renal, hepatic, gastrointestinal, or thyroid function
- With pH and/or electrolyte abnormalities

NCD 190.24



- With unstable cardiovascular status, including myocarditis
- Requiring monitoring of patient compliance

Clinical indications may include individuals:

- Suspected of accidental or intended overdose
- Who have an acceptable cardiac diagnosis (as listed) and for whom an accurate history of use of digoxin is unobtainable

The value of obtaining regular serum digoxin levels is uncertain, but it may be reasonable to check levels once yearly after a steady state is achieved. In addition, it may be reasonable to check the level if:

- Heart failure status worsens
- Renal function deteriorates
- Additional medications are added that could affect the digoxin level
- Signs or symptoms of toxicity develop

Steady state will be reached in approximately 1 week in patients with normal renal function, although 2-3 weeks may be needed in patients with renal impairment. After changes in dosages or the addition of a medication that could affect the digoxin level, it is reasonable to check the digoxin level one week after the change or addition. Based on the clinical situation, in cases of digoxin toxicity, testing may need to be done more than once a week.

Digoxin is indicated for the treatment of patients with heart failure due to systolic dysfunction and for reduction of the ventricular response in patients with atrial fibrillation or flutter. Digoxin may also be indicated to treat other supraventricular arrhythmias, particularly with heart failure.

Limitations

This test is not appropriate for patients on digitoxin or treated with digoxin FAB (fragment antigen binding) antibody.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Doherty JE. Digitalis serum levels: clinical use. Ann Intern Med 1971 May; 74(5):787-789.

Duhme DW, Greenblatt DJ, Koch-Weser J. Reduction of digoxin toxicity associated with measurement of serum levels. A report from the Boston Collaborative Drug Surveillance Program. Ann Intern Med 1974 Apr; 80(4):516-519

Goldman RH, Use of Serum Digoxin Levels in Clinical Practice. JAMA 1974, Jul 15, 229(3).

Howanitz PJ, Steindel SJ. Digoxin therapeutic drug monitoring practices. A College of American Pathologists Q-Probes study of 666 institutions and 18,679 toxic levels. Arch Pathol Lab Med 1993 Jul; 117(7):684-690.

Marcus FI. Pharmacokinetic interactions between digoxin and other drugs. J Am Coll Cardiol 1985 May; 5(5 Suppl A):82A-90A.

Rodin SM, Johnson BF. Pharmacokinetic interactions with digoxin. Clin Pharmaco-kinet 1988 Oct; 15(4):227-244.



Smith TW, Butler VP Jr, Haber E. Determination of therapeutic and toxic serum digoxin concentrations by radioimmunoassay. N Engl J Med 1969 Nov 27; 281(22):1212-1216.

Smith TW, Haber E. Digoxin intoxication: the relationship of clinical presentation to serum digoxin concentration. J Clin Invest 1970, Dec; 49 (12):2377-2386.

Valdes R. Jr, Jortani SA, Gheorghiade M. Standards of laboratory practice: cardiac drug monitoring. National Academy of Clinical Biochemistry. Clin Chem 1998 May; 44(5): 1096-1109.

Konstam M, Dracup K, Baker D, et al. Heart Failure: Evaluation and Care of Patients with Left-Ventricular Systolic Dysfunction. Clinical Practice Guideline No.11. AHCPR Pub. No. 94-0612. Rockville, MD: Agency for Health Care Policy & Research, Public Health Service, U.S. Dept. of Health and Human Services. June 1994.



190.25 - Alpha-fetoprotein

Previously Listed as Edit 14

Other Names/Abbreviations

AFP

Description

Alpha-fetoprotein (AFP) is a polysaccharide found in some carcinomas. It is effective as a biochemical marker for monitoring the response of certain malignancies to therapy.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82105	Alpha-fetoprotein; serum

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
070.22-070.23	Chronic viral hepatitis B with hepatic coma, with or without mention of hepatitis delta
070.32-070.33	Chronic viral hepatitis B without mention of hepatic coma, with or without mention of hepatitis delta
070.44	Chronic hepatitis C with hepatic coma
070.54	Chronic hepatitis C without mention of hepatic coma
095.3	Syphilis of liver
121.1	Clonorchiasis
121.3	Fascioliasis
155.0-155.2	Malignant neoplasm of the liver and intrahepatic bile ducts
164.2-164.9	Malignant neoplasm of the mediastinum
183.0	Malignant neoplasm, ovary
186.0	Malignant neoplasm of undescended testis
186.9	Malignant neoplasm, other and unspecific testis
197.1	Secondary malignant neoplasm of mediastinum
197.7	Secondary malignant neoplasm of liver
198.6	Secondary malignant neoplasm of ovary
198.82	Secondary malignant neoplasm, genital organs
209.20-209.27, 209.29	Malignant carcinoid tumors of other and unspecified sites
209.70	Secondary neuroendocrine tumor, unspecified site

NCD 190.25



Code	Description
209.71	Secondary neuroendocrine tumor of distant lymph nodes
209.72	Secondary neuroendocrine tumor of liver
209.73	Secondary neuroendocrine tumor of bone
209.74	Secondary neuroendocrine tumor of peritoneum
209.75	Secondary Merkel cell carcinoma
209.79	Secondary neuroendocrine tumor of other sites
211.5	Benign neoplasm of liver and biliary passages
235.3	Neoplasm of uncertain behavior of liver and biliary passages
272.2	Mixed hyperlipidemia
273.4	Alpha-1-antitrypsin deficiency
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
275.1	Disorder of copper metabolism
277.00	Cystic Fibrosis without mention of meconium ileus
277.03	Cystic fibrosis with gastrointestinal manifestations
277.6	Other deficiencies of circulating enzymes
285.0	Sideroblastic Anemia
338.3	Neoplasm related pain (acute) (chronic)
571.2	Alcoholic cirrhosis of liver
571.40	Chronic hepatitis, unspecified
571.41	Chronic persistent hepatitis
571.42	Autoimmune hepatitis
571.49	Other chronic hepatitis
571.5	Cirrhosis of liver without mention of alcohol
608.89	Other specified disorders of male genital organs
793.1	Non-specific (abnormal) findings on radiological and other examination of lung field
793.2	Non-specific (abnormal) findings on radiological and other examination of other intrathoracic organs
793.3	Non-specific (abnormal) findings on radiological and other examination of biliary tract
793.6	Non-specific (abnormal) findings on radiological and other examination of abdominal area, including retroperitoneum
795.89	Other abnormal tumor markers
V10.07	Personal history of malignant neoplasm, liver
V10.43	Personal history of malignant neoplasm, ovary
V10.47	Personal history of malignant neoplasm, testis
V86.0	Estrogen receptor positive status [ER+]
V86.1	Estrogen receptor negative status [ER-]



Indications

AFP is useful for the diagnosis of hepatocellular carcinoma in high-risk patients (such as alcoholic cirrhosis, cirrhosis of viral etiology, hemochromatosis, and alpha 1-antitrypsin deficiency) and in separating patients with benign hepatocellular neoplasms or metastases from those with hepatocellular carcinoma and, as a non-specific tumor associated antigen, serves in marking germ cell neoplasms of the testis, ovary, retro peritoneum, and mediastinum.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Tatsuta M. Yamamura H. Iishi H. Kasugai H. Okuda S. Value of serum alpha-fetoprotein and ferritin in the diagnosis of hepatocellular carcinoma. Oncology. 43(5):306-10, 1986.



190.26 - Carcinoembryonic Antigen

Previously Listed as Edit 15

Other Names/Abbreviations

CEA

Description

Carcinoembryonic antigen (CEA) is a protein polysaccharide found in some carcinomas. It is effective as a biochemical marker for monitoring the response of certain malignancies to therapy.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82378	Carcinoembryonic antigen (CEA)

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
150.0-150.9	Malignant neoplasm of the esophagus
151.0-151.9	Malignant neoplasm of stomach
152.0-154.8	Malignant neoplasm of small intestine, including duodenum, rectum, rectosigmoid junction and anus.
157.0-157.9	Primary malignancy of pancreas
159.0	Malignant neoplasm of intestinal tract, part unspecified
162.0-162.9	Malignant neoplasm of trachea, bronchus, lung
174.0-174.9	Malignant neoplasm of female breast
175.0-175.9	Malignant neoplasm of male breast
183.0	Malignant neoplasm of ovary
197.0	Secondary malignant neoplasm of neoplasm of lung
197.4	Secondary malignant neoplasm of small intestine
197.5	Secondary malignant neoplasm of large intestine and rectum
209.00-209.03	Malignant carcinoid tumors of the small intestine
209.10-209.17	Malignant carcinoid tumors of the appendix, large intestine and rectum
209.20-209.27, 209.29	Malignant carcinoid tumors of other and unspecified sites
209.70	Secondary neuroendocrine tumor, unspecified site
209.71	Secondary neuroendocrine tumor of distant lymph nodes
209.72	Secondary neuroendocrine tumor of liver
209.73	Secondary neuroendocrine tumor of bone
209.74	Secondary neuroendocrine tumor of peritoneum



Code	Description
209.75	Secondary Merkel cell carcinoma
209.79	Secondary neuroendocrine tumor of other sites
230.3	Carcinoma in situ of colon
230.4	Carcinoma in situ of rectum
230.7	Carcinoma in situ of other/unspecified parts of intestine
230.9	Carcinoma in situ other and unspecified digestive organs
235.2	Neoplasm of uncertain behavior of stomach, intestines, rectum
338.3	Neoplasm related pain (acute) (chronic)
790.99	Other nonspecific findings on examination of blood
795.81	Elevated carcinoembryonic antigen [CEA]
795.89	Other abnormal tumor markers
V10.00	Personal history of malignant neoplasm of gastro-intestinal tract, unspecified
V10.05	Personal history of malignant neoplasm, large intestine
V10.06	Personal history of malignant neoplasm, rectum, rectosigmoid junction, anus
V10.11	Personal history of malignant neoplasm, bronchus, and lung
V10.3	Personal history of malignant neoplasm, breast
V10.43	Personal history of malignant neoplasm, ovary
V67.2	Follow-up examination following chemotherapy

Indications

CEA may be medically necessary for follow-up of patients with colorectal carcinoma. It would however only be medically necessary at treatment decision-making points. In some clinical situations (e.g. adenocarcinoma of the lung, small cell carcinoma of the lung, and some gastrointestinal carcinomas) when a more specific marker is not expressed by the tumor, CEA may be a medically necessary alternative marker for monitoring. Preoperative CEA may also be helpful in determining the post-operative adequacy of surgical resection and subsequent medical management. In general, a single tumor marker will suffice in following patients with colorectal carcinoma or other malignancies that express such tumor markers.

In following patients who have had treatment for colorectal carcinoma, ASCO guideline suggests that if resection of liver metastasis would be indicated, it is recommended that post-operative CEA testing be performed every two to three months in patients with initial stage II or stage III disease for at least two years after diagnosis.

For patients with metastatic solid tumors which express CEA, CEA may be measured at the start of the treatment and with subsequent treatment cycles to assess the tumor's response to therapy.

Limitations

Serum CEA determinations are generally not indicated more frequently than once per chemotherapy treatment cycle for patients with metastatic solid tumors which express CEA or every two months post-surgical treatment for patients who have had colorectal carcinoma.

NCD 190.26



However, it may be proper to order the test more frequently in certain situations, for example, when there has been a significant change from prior CEA level or a significant change in patient status which could reflect disease progression or recurrence.

Testing with a diagnosis of an in situ carcinoma is not reasonably done more frequently than once, unless the result is abnormal, in which case the test may be repeated once.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Journal Clinical Oncol: 14(10:2843-2877), 1996

Vauthey JN. Dudrick PS. Lind DS. Copeland EM 3rd. Management of recurrent colorectal cancer: another look at carcinoembryonic antigen detected recurrence [see comments]. [Review] Digestive Diseases. 14(1):5©13, 1996 Jan-Feb.

Germ J. The prognostic importance of tumor markers in adenocarcinoma of the gastrointestinal tract. [Review] [38 refs] Current Opinion in Oncology. 9(4):380-7, 1997 Jul.

Bergama chi R. Arnaud JP. Routine compared with nonscheduled follow-up of patients with "curative" surgery for colorectal cancer. Annals of Surgical Oncology. 3(5):464-9, 1996 Sep.

Kim YH. Ajani JA. Ota DM. Lynch P. Roth JA. Value of serial carcinoembryonic antigen levels in patients with respectable adenocarcinoma of the esophagus and stomach Cancer. 75(2):451©6, 1995 Jan 15.



190.27 - Human Chorionic Gonadotropin

Previously Listed as Edit 16

Other Names/Abbreviations

hCG

Description

Human Chorionic Gonadotropin (hCG) is useful for monitoring and diagnosis of germ cell neoplasms of the ovary, testis, mediastinum, retroperitoneum, and central nervous system. In addition, hCG is useful for monitoring pregnant patients with vaginal bleeding, hypertension and/or suspected fetal loss.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
84702	Gonadotropin, chorionic (hCG); quantitative

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
158.0	Malignant neoplasm of retroperitoneum
158.8	Malignant neoplasm of specified parts of peritoneum
164.2	Malignant neoplasm of anterior mediastinum
164.3	Malignant neoplasm of posterior mediastinum
164.8	Malignant neoplasm, other (includes malignant neoplasm of contiguous overlapping sites of thymus, heart, and mediastinum whose point of origin cannot be determined
164.9	Malignant neoplasm of mediastinum, part specified
181	Malignant neoplasm of placenta
183.0	Malignant neoplasm of ovary
183.8	Other specified sites of uterine adnexa
186.0	Malignant neoplasm of undescended testis
186.9	Malignant neoplasm of other and unspecified testis
194.4	Malignant neoplasm of pineal gland
197.1	Secondary malignant neoplasm of mediastinum
197.6	Secondary malignant neoplasm of retroperitoneum and peritoneum
198.6	Secondary malignant neoplasm of ovary
198.82	Secondary malignant neoplasm of other genital organs
236.1	Neoplasm of uncertain behavior, placenta
338.3	Neoplasm related pain (acute) (chronic)

NCD 190.27



Code	Description
623.8	Vaginal bleeding
625.9	Pelvic pain
630	Hydatidiform mole
631	Pregnancy, molar
632	Missed abortion
633.90-633.91	Unspecified ectopic pregnancy
634.00-634.02	Spontaneous abortion, complicated by genital tract and pelvic infection
640.00-640.03	Threatened abortion
642.30-642.34	Transient hypertension of pregnancy
642.40-642.74	Pre-eclampsia or eclampsia
642.90-642.94	Unspecified hypertension complicating pregnancy, childbirth, or the
	puerperium
795.89	Other abnormal tumor markers
V10.09	Personal history of malignant neoplasm, other gastrointestinal sites
V10.29	Personal history of malignant neoplasm of other respiratory and intrathoracic organs
V10.43	Personal history of malignant neoplasm, ovary
V10.47	Personal history of malignant neoplasm, testis
V22.0-V22.1	Normal pregnancy

Limitations

It is not reasonable and necessary to perform hCG testing more than once per month for diagnostic purposes. It may be performed as needed for monitoring of patient progress and treatment. Qualitative hCG assays are not appropriate for medically managing patients with known or suspected germ cell neoplasms.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

O'Callaghan A. Mead GM. Testicular carcinoma. [Review] [23 Refs] Postgraduate Medical Journal. 73(862):4816, 1997 Aug.

Sawamura Y. Current diagnosis and treatment of central nervous system germ cell tumors. [Review] [47 Refs] Current Opinion in Neurology. 9(6):41923, 1996 Dec.

Wilkins M. Horwich A. Diagnosis and treatment of urological malignancy: The testes. [Review] [23 Refs] British Journal of Hospital Medicine. 55(4): 199203, 1996. Feb 21, Mar 5.



190.28 - Tumor Antigen by Immunoassay CA 125

Previously Listed as Edit 17

Description

Immunoassay determinations of the serum levels of certain proteins or carbohydrates serve as tumor markers. When elevated, serum concentration of these markers may reflect tumor size and grade.

This policy specifically addresses tumor antigen CA 125.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
86304	Immunoassay for tumor antigen, quantitative, CA 125

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
158.8	Malignant neoplasm, specified parts of peritoneum
158.9	Malignant neoplasm, peritoneum, unspecified
180.0	Malignant neoplasm, endocervix
182.0	Malignant neoplasm of corpus uteri, except isthmus
183.0	Malignant neoplasm,ovary
183.2	Malignant neoplasm, fallopian tube
183.8	Malignant neoplasm, other specified sites of uterine adnexa
184.8	Malignant neoplasm, other specified sites of female genital organs
198.6	Secondary malignant neoplasm, ovary
198.82	Secondary malignancy of genital organs
236.0-236.3	Neoplasm of uncertain behavior of female genital organs
338.3	Neoplasm related pain (acute) (chronic)
789.39	Abdominal or pelvic swelling, mass or lump of other specified site
795.82	Elevated cancer antigen 125 [CA 125]
795.89	Other abnormal tumor markers
V10.41	Personal history of malignant neoplasm, cervix uteri
V10.42	Personal history of malignant neoplasm, other parts of the uterus
V10.43-V10.44	Personal history of malignant neoplasm of female genital organs

Indications

CA 125 is a high molecular weight serum tumor marker elevated in 80% of patients who present with epithelial ovarian carcinoma. It is also elevated in carcinomas of the fallopian tube,

NCD 190.28

*April 11 Changes - Red

Fu Associates, Ltd. 118 April 2011



endometrium, and endocervix. An elevated level may also be associated with the presence of a malignant mesothelioma or primary peritoneal carcinoma.

A CA 125 level may be obtained as part of the initial pre-operative work-up for women presenting with a suspicious pelvic mass to be used as a baseline for purposes of post-operative monitoring. Initial declines in CA 125 after initial surgery and/or chemotherapy for ovarian carcinoma are also measured by obtaining three serum levels during the first month post treatment to determine the patient's CA 125 half-life, which has significant prognostic implications.

The CA 125 levels are again obtained at the completion of chemotherapy as an index of residual disease. Surveillance CA 125 measurements are generally obtained every 3 months for 2 years, every 6 months for the next 3 years, and yearly thereafter. CA 125 levels are also an important indicator of a patient's response to therapy in the presence of advanced or recurrent disease. In this setting, CA 125 levels may be obtained prior to each treatment cycle.

Limitations

These services are not covered for the evaluation of patients with signs or symptoms suggestive of malignancy. The service may be ordered at times necessary to assess either the presence of recurrent disease or the patient's response to treatment with subsequent treatment cycles.

The CA 125 is specifically not covered for aiding in the differential diagnosis of patients with a pelvic mass as the sensitivity and specificity of the test is not sufficient. In general, a single "tumor marker" will suffice in following a patient with one of these malignancies.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Documentation Requirements

Indicated if service request for CA125 is requested more frequently than stipulated.

Sources of Information

Clinical Pancreatic Guideline for the Use of Tumor Markers in Breast and Colorectal Cancer, American Society of Clinical Oncology. J Clin Oncol 14:2843-2877, 1996.

Chan DW, Beveridge RA, Muss H, et al. Use of Triquant BR Radioimmunoassay for Early Detection of Breast Cancer Recurrence in Patients with Stage II and Stage III Disease. J Clin Oncol 1977, 15(6):2322-2328.



190.29 - Tumor Antigen by Immunoassay CA 15-3/CA 27.29

Previously Listed as Edit 18

Description

Immunoassay determinations of the serum levels of certain proteins or carbohydrates serve as tumor markers. When elevated, serum concentration of markers may reflect tumor size & grade. This policy specifically addresses the following tumor antigens: CA 15-3 and CA 27.29

HCPCS Codes (Alphanumeric, CPT[©] AMA)

Code	Description
86300	Immunoassay for tumor antigen, quantitative; CA 15-3 (27.29)

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
174.0-174.9	Breast, primary (female) - malignant neoplasm of female breast
175.0-175.9	Breast, primary (male) - malignant neoplasm of male breast
198.2	Secondary malignant neoplasm (skin of breast)
198.81	Secondary malignant neoplasm (breast)
338.3	Neoplasm related pain (acute) (chronic)
795.89	Other abnormal tumor markers
V10.3	Personal history of malignant neoplasm, breast

Indications

Multiple tumor markers are available for monitoring the response of certain malignancies to therapy and assessing whether a residual tumor exists post-surgical therapy. CA 15-3 is often medically necessary to aid in the management of patients with breast cancer. Serial testing must be used in conjunction with other clinical methods for monitoring breast cancer. For monitoring, if medically necessary, use consistently either CA 15-3 or CA 27.29, not both. CA 27.29 is equivalent to CA 15-3 in its usage in management of patients with breast cancer.

Limitations

These services are not covered for the evaluation of patients with signs or symptoms suggestive of malignancy. The service may be ordered at times necessary to assess either the presence of recurrent disease or the patient's response to treatment with subsequent treatment cycles.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.



Sources of Information

Clinical Pancreatic Guideline for the Use of Tumor Markers in Breast and Colorectal Cancer, American Society of Clinical Oncology. J Clin Oncol 14:2843-2877, 1996.

Chan DW, Beveridge RA, Muss H, et al. Use of Triquant BR Radioimmunoassay for Early Detection of Breast Cancer Recurrence in Patients with Stage II & Stage III Disease. J Clin Oncol 1977, 15(6):2322-2328.

Bone GG, von Mensdorff-Pouilly S, Kenemans P, van Kamp GJ, et al. Clinical and Technical Evaluation of ACS BR Serum Assay of MUC-1 Gene Derived Glycoprotein in Breast Cancer, and Compared with CA15-3 Assays. Clin Chem 1997, 43(4):585-593.



190.30 - Tumor Antigen by Immunoassay CA 19-9

Previously Listed as Edit 19

Description

Immunoassay determinations of the serum levels of certain proteins or carbohydrates serve as tumor markers. When elevated, serum concentration of these markers may reflect tumor size and grade. This policy specifically addresses the following tumor antigen: CA19-9.

HCPCS Codes (Alphanumeric, CPT[©] AMA)

Code	Description
86301	Immunoassay for tumor antigen, quantitative; CA 19-9

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
155.1	Malignant neoplasm, intrahepatic bile ducts
156.0	Malignant neoplasm of the gallbladder
156.1	Malignant neoplasm, extrahepatic bile ducts
156.2	Malignant neoplasm of the Ampulla of Vater
156.8	Malignant neoplasm, other specified sites of gallbladder and extrahepatic bile ducts
156.9	Malignant neoplasm, unspecified part of biliary tract
157.0-157.9	Malignant neoplasm, pancreas
197.8	Secondary malignant neoplasm, other digestive organs and spleen
235.3	Neoplasm of uncertain behavior, liver and biliary passages
235.5	Neoplasm of uncertain behavior, other & unspecified digestive organs
338.3	Neoplasm related pain (acute) (chronic)
795.89	Other abnormal tumor markers
V10.09	Other personal history of cancer

Indications

Multiple tumor markers are available for monitoring the response of certain malignancies to therapy and assessing whether residual tumor exists post-surgical therapy.

Levels are useful in following the course of patients with established diagnosis of pancreatic and biliary ductal carcinoma. The test is not indicated for diagnosing these two diseases.



Limitations

These services are not covered for the evaluation of patients with signs or symptoms suggestive of malignancy. The service may be ordered at times necessary to assess either the presence of recurrent disease or the patient's response to treatment with subsequent treatment cycles.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Clinical Pancreatic Guideline for the Use of Tumor Markers in Breast and Colorectal Cancer, American Society of Clinical Oncology. J Clin Oncol 14:2843-2877, 1996.

Richter JM, Christensen MR, Rustgi AK, and Silverstein MD. The Clinical Utility of the CA19-9 Radioimmunoassay for the Diagnosis of Pancreatic Cancer Presenting as Pain or Weight Loss: A Cost Effective Analysis. Arch Intern Med 1989, 149:2292-2297.

Safi F, SchlosseW, Falkenreck S, et. al. Prognostic Value of CA 19-9 Serum Course in Pancreatic Cancer. Hepaetogastroenterology 1998 Jan-Feb; 45(19):253-9.



190.31 - Prostate Specific Antigen

Previously Listed as Edit 20

Other Names/Abbreviations

Total PSA

Description

Prostate Specific Antigen (PSA), a tumor marker for adenocarcinoma of the prostate, can predict residual tumor in the post-operative phase of prostate cancer. Three to 6 months after radical prostatectomy, PSA is reported to provide a sensitive indicator of persistent disease. Six months following introduction of antiandrogen therapy, PSA is reported of distinguishing patients with favorable response from those in whom limited response is anticipated.

PSA when used in conjunction with other prostate cancer tests, such as digital rectal examination, may assist in the decision-making process for diagnosing prostate cancer. PSA also, serves as a marker in following the progress of most prostate tumors once a diagnosis has been established. This test is also an aid in the management of prostate cancer patients and in detecting metastatic or persistent disease in patients following treatment.

HCPCS Codes (Alphanumeric, CPT[©] AMA)

Code	Description
84153	Prostate Specific Antigen (PSA), total

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
185	Malignant neoplasm of prostate
188.5	Malignant neoplasm of bladder neck
196.5	Secondary malignant neoplasm, lymph nodes of inguinal region & lower limb
196.6	Secondary malignant neoplasm, intrapelvic lymph nodes
196.8	Secondary malignant neoplasm, lymph nodes of multiple sites
198.5	Secondary malignant neoplasm, bone and bone marrow
198.82	Secondary malignant neoplasm, genital organs
233.4	Carcinoma in situ, prostate
236.5	Neoplasm of uncertain behavior of prostate
239.5	Neoplasm of unspecified nature, other genitourinary organs
596.0	Bladder neck obstruction
599.60, 599.69	Urinary obstruction
599.70	Hematuria, unspecified



Code	Description
599.71	Gross hematuria
599.72	Microscopic hematuria
600.00	Hypertrophy (benign) of prostate without urinary obstruction and other lower urinary tract (LUTS)
600.01	Hypertrophy (benign) of prostate with urinary obstruction and other lower urinary tract symptoms (LUTS)
600.10	Nodular prostate without urinary obstruction
600.11	Nodular prostate with urinary obstruction
600.21	Benign localized hyperplasia of prostate with urinary obstruction and other lower urinary tract symptoms (LUTS)
601.9	Unspecified prostatitis
602.9	Unspecified disorder of prostate
788.20	Retention of urine, unspecified
788.21	Incomplete bladder emptying
788.30	Urinary incontinence, unspecified
788.41	Urinary frequency
788.43	Nocturia
788.62	Slowing of urinary stream
788.63	Urgency of urination
788.64	Urinary hesitancy
788.65	Straining on urination
790.93	Elevated prostate specific antigen (PSA)
793.6	Non-specific (abnormal) findings on radiological and other examination of abdominal area, including retroperitoneum
793.7	Non-specific (abnormal) findings on radiological and other examination of musculoskeletal system
794.9	Bone scan evidence of malignancy
V10.46	Personal history of malignant neoplasm; prostate

Indications

PSA is of proven value in differentiating benign from malignant disease in men with lower urinary tract signs & symptoms (e.g., hematuria, slow urine stream, hesitancy, urgency, frequency, nocturia & incontinence) as well as with patients with palpably abnormal prostate glands on physician exam, and in patients with other laboratory or imaging studies that suggest the possibility of a malignant prostate disorder. PSA is also a marker used to follow the progress of prostate cancer once a diagnosis has been established, such as detecting metastatic or persistent disease in patients who may require additional treatment. PSA testing may also be useful in the differential diagnosis of men presenting with as yet undiagnosed disseminated metastatic disease.



Limitations

Generally, for patients with lower urinary tract signs or symptoms, the test is performed only once per year unless there is a change in the patient's medical condition.

Testing with a diagnosis of in situ carcinoma is not reasonably done more frequently than once, unless the result is abnormal, in which case the test may be repeated once.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Laboratory Test Handbook, 3rd edition, pp.338-340.

Cooner WH, Mosley BR, Rutherford CL, et al. Prostate Cancer Detection in a Clinical Urological Practice by Ultrasonography, Digital Rectal Examination and Prostate Specific Antigen. J.Urol.1990; 143: 1146-1154.



190.32 - Gamma Glutamyl Transferase

Previously Listed as Edit 21 Other Names/Abbreviations GGT

Description

Gamma glutamyl transferase (GGT) is an intracellular enzyme that appears in blood following leakage from cells. Renal tubules, liver, and pancreas contain high amounts, although the measurement of GGT in serum is almost always used for assessment of Hepatobiliary function. Unlike other enzymes which are found in heart, skeletal muscle, and intestinal mucosa as well as liver, the appearance of an elevated level of GGT in serum is almost always the result of liver disease or injury. It is specifically useful to differentiate elevated alkaline phosphatase levels when the source of the alkaline phosphatase increase (bone, liver, or placenta) is unclear. The combination of high alkaline phosphatase and a normal GGT does not, however, rule out liver disease completely.

As well as being a very specific marker of Hepatobiliary function, GGT is also a very sensitive marker for hepatocellular damage. Abnormal concentrations typically appear before elevations of other liver enzymes or biliuria are evident. Obstruction of the biliary tract, viral infection (e.g., hepatitis, mononucleosis), metastatic cancer, exposure to hepatotoxins (e.g., organic solvents, drugs, alcohol), and use of drugs that induce microsomal enzymes in the liver (e.g., cimetidine, barbiturates, phenytoin, and carbamazepine) all can cause a moderate to marked increase in GGT serum concentration. In addition, some drugs can cause or exacerbate liver dysfunction (e.g., atorvastatin, troglitazone, and others as noted in FDA Contraindications and Warnings.)

GGT is useful for diagnosis of liver disease or injury, exclusion of hepatobiliary involvement related to other diseases, and patient management during the resolution of existing disease or following injury.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82977	Glutamyl transferase, gamma (GGT)

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
003.1	Salmonella septicemia
006.0-006.9	Amebiasis
014.00-014.86	Tuberculosis of intestines, peritoneum, and mesenteric glands
017.90-017.96	Tuberculosis of other specified organs
018.90-018.96	Miliary tuberculosis, unspecified

NCD 190.32



Code	Description
020.0-020.9	Plague
022.3	Anthrax septicemia
027.0	Listeriosis
027.1	Erysipelothrix infection
030.1	Tuberculoid leprosy [Type T]
032.83	Diphtheritic peritonitis
036.1	Meningococcal encephalitis
036.2	Meningococcemia
038.0, 038.10-038.19, 038.2, 038.3, 038.40-038.49, 038.8, 038.9	Septicemia
038.12	Methicillin resistant Staphylococcus aureus septicemia
039.2	Actinomycotic infections, abdominal
040.0	Gas gangrene
042	Human immunodeficiency virus (HIV) disease
054.0	Eczema herpeticum
054.5	Herpetic septicemia
060.0-060.1	Yellow fever
070.0-070.9	Viral hepatitis
072.71	Mumps hepatitis
073.0	Ornithosis, with pneumonia
074.8	Other specified diseases due to Coxsackie virus
075	Infectious mononucleosis
078.5	Cytomegaloviral disease
079.99	Unspecified viral infection
082.0-082.9	Tick-borne rickettsioses, stet
084.9	Other pernicious complications of malaria
086.1	Chagas disease with organ involvement other than heart
088.81	Lyme disease
091.62	Secondary syphilitic hepatitis
095.3	Syphilis of liver
100.0	Leptospirosis icterohemorrhagica
112.5	Candidiasis, disseminated
115.00	Infection by Histoplasma capsulatum without mention of manifestation
120.9	Schistosomiasis, unspecified
121.1	Clonorchiasis
121.3	Fascioliasis
122.0	Echinococcus granulosus infection of liver
122.5	Echinococcus multilocularis infection of liver
122.8	Echinococcosis, unspecified, of liver
122.9	Echinococcus, other and unspecified

NCD 190.32



Code	Description
130.5	Hepatitis due to toxoplasmosis
135	Sarcoidosis
150.0-159.9	Malignant neoplasm of digestive organs and peritoneum
160.0-165.9	Malignant neoplasm of respiratory and intrathoracic organs
170.0-176.9	Malignant neoplasm of bone, connective tissue, skin, and breast
179-189.9	Malignant neoplasm of genitourinary organs
200.00-200.28	Lymphosarcoma and reticulosarcoma; Burkitt's tumor or lymphoma
200.30-200.38	Marginal zone lymphoma
200.40-200.48	Mantle cell lymphoma
200.50-200.58	Primary central nervous system lymphoma
200.60-200.68	Anaplastic large cell lymphoma
200.70-200.78	Large cell lymphoma
200.80-200.88	Malignant tumors of lymphatic tissue; other named variants
201.00-201.98	Hodgkin's disease
202.00-202.68	Other malignant neoplasms of lymphoid and histiocytic tissue
202.70-202.78	Peripheral T-cell lymphoma
202.80-202.98	Other lymphomas; other and unspecified malignant neoplasms of lymphoid and histiocytic tissue
203.00-203.01	Multiple myeloma, without mention of having achieved remission and in remission
203.02	Multiple myeloma, in relapse
203.10-203.11	Plasma cell leukemia, without mention of having achieved remission and in remission
203.12	Plasma cell leukemia, in relapse
203.80-203.81	Other immunoproliferative neoplasms, without mention of having achieved remission and in remission
203.82	Other immunoproliferative neoplasms, in relapse
204.00-204.01	Acute lymphoid leukemia, without mention of having achieved remission and in remission
204.02	Acute lymphoid leukemia, in relapse
204.10-204.11	Chronic lymphoid leukemia, without mention of having achieved remission and in remission
204.12	Chronic lymphoid leukemia, in relapse
204.20-204.21	Subacute lymphoid leukemia, without mention of having achieved remission and in remission
204.22	Subacute lymphoid leukemia, in relapse
204.80-204.81	Other lymphoid leukemia, without mention of having achieved remission and in remission
204.82	Other lymphoid leukemia, in relapse
204.90-204.91	Unspecified lymphoid leukemia, without mention of having achieved remission and in remission
204.92	Unspecified lymphoid leukemia, in relapse



Code	Description
205.00-205.01	Acute myeloid leukemia, without mention of having achieved remission and in remission
205.02	Acute myeloid leukemia, In relapse
205.10-205.11	Chronic myeloid leukemia, without mention of having achieved remission and in remission
205.12	Chronic myeloid leukemia, in relapse
205.20-205.21	Subacute myeloid leukemia, without mention of having achieved remission and in remission
205.22	Subacute myeloid leukemia, in relapse
205.30-205.31	Myeloid sarcoma, without mention of having achieved remission and in remission
205.32	Myeloid sarcoma, in relapse
205.80-205.81	Other myeloid leukemia, without mention of having achieved remission and in remission
205.82	Other myeloid leukemia, in relapse
205.90-205.91	Unspecified myeloid leukemia, without mention of having achieved remission and in remission
205.92	Unspecified myeloid leukemia, in relapse
206.00-206.01	Acute monocytic leukemia, without mention of having achieved remission and in remission
206.02	Acute monocytic leukemia, in relapse
206.10-206.11	Chronic monocytic leukemia, without mention of having achieved remission and in remission
206.12	Chronic monocytic leukemia, in relapse
206.20-206.21	Subacute monocytic leukemia, without mention of having achieved remission and in remission
206.22	Subacute monocytic leukemia, in relapse
206.80-206.81	Other monocytic leukemia, without mention of having achieved remission and in remission
206.82	Other monocytic leukemia, in relapse
206.90-206.91	Unspecified monocytic leukemia, without mention of having achieved remission and in remission
206.92	Unspecified monocytic leukemia, in relapse
207.00-207.01	Acute erythremia and erythroleukemia, without mention of having achieved remission and in remission
207.02	Acute erythremia and erythroleukemia, in relapse
207.10-207.11	Chronic erythremia, without mention of having achieved remission and in remission
207.12	Chronic erythremia, in relapse
207.20-207.21	Megakaryocytic leukemia, without mention of having achieved remission and in remission
207.22	Megakaryocytic leukemia, in relapse

NCD 190.32



Code	Description
207.80-207.81	Other specified leukemia, without mention of having achieved remission and in remission
207.82	Other specified leukemia, in relapse
208.00-208.01	Acute leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.02	Acute leukemia of unspecified cell type, in relapse
208.10-208.11	Chronic leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.12	Chronic leukemia of unspecified cell type, in relapse
208.20-208.21	Subacute leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.22	Subacute leukemia of unspecified cell type, in relapse
208.80-208.81	Other leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.82	Other leukemia of unspecified cell type, in relapse
208.90-208.91	Unspecified leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.92	Unspecified leukemia of unspecified cell type, in relapse
209.20-209.27, 209.29	Malignant carcinoid tumors of other and unspecified sites
209.70	Secondary neuroendocrine tumor, unspecified site
209.71	Secondary neuroendocrine tumor of distant lymph nodes
209.72	Secondary neuroendocrine tumor of liver
209.73	Secondary neuroendocrine tumor of bone
209.74	Secondary neuroendocrine tumor of peritoneum
209.75	Secondary Merkel cell carcinoma
209.79	Secondary neuroendocrine tumor of other sites
211.5	Benign neoplasm of liver and biliary passages
211.6	Benign neoplasm of pancreas, except islets of Langerhans
211.7	Benign neoplasm of islets of Langerhans
228.04	Hemangioma of intra-abdominal structures
230.7	Carcinoma in situ of other and unspecified parts of intestine
230.8	Carcinoma in situ of liver and biliary system
230.9	Carcinoma in situ other and unspecified digestive organs
235.0-235.9	Neoplasms of uncertain behavior of digestive and respiratory systems
236.0-236.99	Neoplasms of uncertain behavior of genitourinary organs
237.0-237.72	Neoplasms of uncertain behavior of endocrine glands and nervous system
237.73	Schwannomatosis
237.79	Other neurofibromatosis
237.9	Other and uncertain parts of the nervous system
238.0-238.6	Neoplasms of uncertain behavior of other and unspecified sites and tissues

NCD 190.32



Code	Description
238.71-238.76	Neoplasms of other lymphatic and hematopoietic tissues
238.77	Post-transplant lymphoproliferative disorder (PTLD)
238.79	Other lymphatic and hematopoietic tissues
238.8	Other specified sites
238.9	Site unspecified
239.0	Neoplasm of unspecified nature of digestive system
250.00-250.93	Diabetes mellitus
252.00-252.02, 252.08	Hyperparathyroidism
263.1	Malnutrition of mild degree
263.9	Unspecified protein-calorie malnutrition
268.0	Rickets, active
268.2	Osteomalacia, unspecified
269.0	Deficiency of vitamin K
270.2	Other disturbances of aromatic amino acid metabolism
270.9	Unspecified disorder of amino acid metabolism
271.0	Glycogenosis
272.0	Pure hypercholesterolemia
272.1	Pure hypertriglyceridemia
272.2	Mixed hyperlipidemia
272.4	Other and unspecified hyperlipidemia
272.7	Lipidoses
272.9	Unspecified disorder of lipoid metabolism
273.4	Alpha-1-antitrypsin deficiency
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
275.1	Disorders of copper metabolism
275.2	Disorders of magnesium metabolism
275.3	Disorders of phosphorus metabolism
275.40-275.49	Disorders of calcium metabolism
275.5	Hungry bone syndrome
277.1	Disorders of porphyrin metabolism
277.30	Amyloidosis, unspecified
277.31	Familial Mediterranean fever
277.39	Other amyloidosis
277.4	Disorders of biliuria excretion
277.6	Other deficiencies of circulating enzymes
282.60-282.69	Sickle cell disease
286.6	Defibrination syndrome
286.7	Acquired coagulation factor deficiency

NCD 190.32



Code	Description
289.4	Hypersplenism
289.52	Splenic sequestration
291.0-291.9	Alcoholic psychoses
303.00-303.03	Acute alcoholic intoxication
303.90-303.93	Other and unspecified alcohol dependence
304.00-304.93	Drug dependence
305.00-305.93	Non-dependent abuse of drugs
357.5	Alcoholic polyneuropathy
359.21	Myotonic muscular dystrophy
359.22	Myotonia congenita
359.23	Myotonic chondrodystrophy
359.24	Drug induced myotonia
359.29	Other specified myotonic disorder
452	Portal vein thrombosis
456.0-456.21	Esophageal varices
453.0	Budd-Chiari syndrome
453.1	Thrombophlebitis migrans
453.2	Embolism and thrombosis of inferior vena cava
453.3	Embolism and thrombosis of renal vein
453.40	Acute venous embolism and thrombosis of unspecified deep vessels of lower extremity
453.41	Acute venous embolism and thrombosis of deep vessels of proximal lower extremity
453.42	Acute venous embolism and thrombosis of deep vessels of distal lower extremity
453.50	Chronic venous embolism and thrombosis of unspecified deep vessels of lower extremity
453.51	Chronic venous embolism and thrombosis of deep vessels of proximal lower extremity
453.52	Chronic venous embolism and thrombosis of deep vessels of distal lower extremity
453.6	Venous embolism and thrombosis of superficial vessels of lower extremity
453.71	Chronic venous embolism and thrombosis of superficial veins of upper extremity
453.72	Chronic venous embolism and thrombosis of deep veins of upper extremity
453.73	Chronic venous embolism and thrombosis of upper extremity, unspecified
453.74	Chronic venous embolism and thrombosis of axillary veins
453.75	Chronic venous embolism and thrombosis of subclavian veins
453.76	Chronic venous embolism and thrombosis of internal jugular veins
453.77	Chronic venous embolism and thrombosis of other thoracic veins

NCD 190.32



Code	Description
453.79	Chronic venous embolism and thrombosis of other specified veins
453.81	Acute venous embolism and thrombosis of superficial veins of upper extremity
453.82	Acute venous embolism and thrombosis of deep veins of upper extremity
453.83	Acute venous embolism and thrombosis of upper extremity, unspecified
453.84	Acute venous embolism and thrombosis of axillary veins
453.85	Acute venous embolism and thrombosis of subclavian veins
453.86	Acute venous embolism and thrombosis of internal jugular veins
453.87	Acute venous embolism and thrombosis of other thoracic veins Acute venous embolism and thrombosis of other specified veins
453.89	·
453.9	Other venous embolism and thrombosis of unspecified site
456.0-456.21	Esophageal varices
555.0-555.9	Regional enteritis
556.0-556.9	Ulcerative colitis
557.0	Acute vascular insufficiency of intestine
558.1-558.3, 558.41-558.49, 558.9	Other and unspecified noninfectious gastroenteritis and colitis
560.0-560.2	Intestinal obstruction: intussusceptions, paralytic ileus, volvulus
560.30	Impaction of intestine, unspecified
560.31	Gallstone ileus
560.32	Fecal impaction
560.39	Other impaction of intestine
560.81-560.89, 560.9	Other and unspecified intestinal obstruction
562.01	Diverticulitis of small intestine (without mention of hemorrhage)
562.03	Diverticulitis of small intestine with hemorrhage
562.11	Diverticulitis of colon (without mention of hemorrhage)
562.13	Diverticulitis of colon with hemorrhage
567.0-567.29, 567.38-567.9	Peritonitis
569.83	Perforation of intestine
569.87	Vomiting of fecal matter
570	Acute and subacute necrosis of liver
571.0-571.9	Chronic liver disease and cirrhosis
572.0	Abscess of liver
572.1	Portal pyemia
572.2	Hepatic encephalopathy
572.3	Portal hypertension
572.4	Hepatorenal syndrome
572.8	Other sequelae of chronic liver disease
573.0-573.9	Other disorders of liver

NCD 190.32



Code	Description
575.0-575.9	Other disorders of gallbladder
576.0-576.9	Other disorders of biliary tract
581.0-581.9	Nephrotic syndrome
582.0-582.9	Chronic glomerulonephritis
583.0-583.9	Nephritis and nephropathy not specified as acute or chronic
584.5	Acute kidney failure with lesion of tubular necrosis
584.6	Acute kidney failure with lesion of renal cortical necrosis
584.7	Acute kidney failure with lesion of renal medullary (papillary) necrosis
584.8	Acute kidney failure with other specified pathological lesion in kidney
584.9	Acute kidney failure, unspecified
585.6	End stage renal disease
586	Renal failure, unspecified
587	Renal sclerosis, unspecified
588.0-588.9	Disorders resulting from impaired renal function
590.00-590.9	Infections of kidney
642.50-642.54	Severe pre-eclampsia
646.70, 646.71, 646.73	Liver disorders in pregnancy
782.4	Jaundice, unspecified, not of newborn
789.1	Hepatomegaly
790.4	Nonspecific elevation of levels of transaminase or lactic acid dehydrogenase
790.5	Other nonspecific abnormal serum enzyme levels
960.0-960.9	Poisoning by antibiotics
961.0-961.9	Poisoning by other anti-infectives
962.0-962.9	Poisoning by hormones and synthetic substitutes
963.0-963.5, 963.8, 963.9	Poisoning by primarily systemic agents
964.0-964.9	Poisoning by agents primarily affecting blood constituents
965.00-965.02, 965.09, 965.1, 965.4-965.5, 965.61, 965.69, 965.7-965.9	Poisoning by analgesics, antipyretics, and antirheumatics
966.0-966.4	Poisoning by anticonvulsants and anti-parkinsonism drugs
967.0-967.6, 967.8, 967.9	Poisoning by sedatives and hypnotics
968.0-968.7, 968.9	Poisoning by other CNS depressants and anesthetics
969.00	Poisoning by antidepressant, unspecified
969.01	Poisoning by monoamine oxidase inhibitors
969.02	Poisoning by selective serotonin & norepinephrine reuptake inhibitors
969.03	Poisoning by selective serotonin reuptake inhibitors
969.04	Poisoning by tetracyclic antidepressants
969.05	Poisoning by tricyclic antidepressants
969.09	Poisoning by other antidepressants
969.1-969.5, 969.6	Poisoning by tranquilizers and psychodysleptics (hallucinogens)

NCD 190.32



Code	Description
969.70	Poisoning by psychostimulant, unspecified
969.71	Poisoning by caffeine
969.72	Poisoning by amphetamines
969.73	Poisoning by methylphenidate
969.79	Poisoning by other psychostimulants
969.8, 969.9	Poisoning by other specified and unspecified psychotropic agents
970.0-970.1	Poisoning by analeptics and opiate antagonists
970.81	Poisoning by cocaine
970.89	Poisoning by other central nervous system stimulants
970.9	Poisoning by unspecified central nervous system stimulants
971.0-971.3, 971.9	Poisoning by drugs primarily affecting the autonomic nervous system
972.0-972.9	Poisoning by agents primarily affecting the cardiovascular system
973.0-973.6, 973.8, 973.9	Poisoning by agents primarily affecting the GI system
974.0-974.7	Poisoning by water, mineral, and uric acid metabolism drugs
975.0-975.8	Poisoning by agents primarily acting on the smooth and skeletal
976.0-976.9	muscles and respiratory system Poisoning by agents primarily affecting skin and mucous membrane,
970.0-970.9	ophthalmological, otorhinolaryngological, and dental drugs
977.0-977.4, 977.8, 977.9	Poisoning by other and unspecified drugs, and medicinal substances
978.0-978.6, 978.8, 978.9	Poisoning by bacterial vaccines
979.0-979.7	Poisoning by other vaccines and biological sustances
979.9	Poisoning by drugs, medicinal, and biological substances
980.0-989.89	Toxic effects of substances chiefly nonmedicinal as to source
V42.7	Organ replaced by transplant, liver
V58.61-V58.64, V58.69	Long-term (current) drug use
V67.1	Follow-up examination, radiotherapy
V67.2	Follow-up examination, chemotherapy
V67.51	Follow-up examination after completed treatment with high-risk medications, not elsewhere classified

Indications

- 1. To provide information about known or suspected hepatobiliary disease, for example:
 - a. Following chronic alcohol or drug ingestion
 - b. Following exposure to hepatotoxins
 - c. When using medication known to have a potential for causing liver toxicity (e.g., following the drug manufacturer's recommendations)
 - d. Following infection (e.g., viral hepatitis and other specific infections such as amebiasis, tuberculosis, psittacosis, and similar infections)
- 2. To assess liver injury/function following diagnosis of primary or secondary malignant neoplasms

NCD 190.32



- 3. To assess liver injury/function in a wide variety of disorders and diseases known to cause liver involvement (e.g., diabetes mellitus, malnutrition, disorders of iron and mineral metabolism, sarcoidosis, amyloidosis, lupus, and hypertension)
- 4. To assess liver function related to gastrointestinal disease
- 5. To assess liver function related to pancreatic disease
- 6. To assess liver function in patients subsequent to liver transplantation
- 7. To differentiate between the different sources of elevated alkaline phosphatase activity

Limitations

When used to assess liver dysfunction secondary to existing non-hepatobiliary disease with no change in signs, symptoms, or treatment, it is generally not necessary to repeat a GGT determination after a normal result has been obtained unless new indications are present.

If the GGT is the only "liver" enzyme abnormally high, it is generally not necessary to pursue further evaluation for liver disease for this specific indication.

When used to determine if other abnormal enzyme tests reflect liver abnormality rather than other tissue, it generally is not necessary to repeat a GGT more than one time per week.

Because of the extreme sensitivity of GGT as a marker for cytochrome oxidase induction or cell membrane permeability, it is generally not useful in monitoring patients with known liver disease.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Ockner, R.K., "Clinical approach to liver disease," in Wyngaarden, J.B., and Smith, L.H. (eds.), Cecil Textbook of Medicine (18th ed.), 1988, W.B. Saunders, pp. 808-809.

Ockner, R.K., "Laboratory tests in liver disease," in Wyngaarden, J.B., and Smith, L.H. (eds.), Cecil Textbook of Medicine (18th ed.), 1988, W.B. Saunders, pp. 814-817.

Gornall, A.G., and Goldberg, D.M., "Hepatobiliary Disorders," in Gornall, A.G. (ed.), <u>Applied Biochemistry of Clinical Disorders</u> (2nd ed.), 1986, J.B. Lippincott, pp. 211-246.

Scharschmidt, B.F., "Parasitic, bacterial, fungal, and granulomatous liver disease," in Wyngaarden, J.B., and Smith, L.H. (eds.), <u>Cecil Textbook of Medicine</u> (18th ed.), 1988, W.B. Saunders, pp. 834-838.

Pincus, M.R.,& Schaffner, J.A., "Assessment of liver function," Henry, J.B. (ed.), <u>Clinical Diagnosis & Management by Laboratory Methods</u> (19th ed.), 1996, WB Saunders, pp. 253-267.

Bordley, D.R., Nattinger, A.B., <u>et al.</u>, "Gastrointestinal, Hepatobiliary, and Pancreatic Problems," in Panzer, R.J., Black, E.R., and Griner, P.F. (eds.), <u>Diagnostic Strategies for Common Medical Problems</u>, 1991, American College of Physicians, pp. 94-185.

Tietz, N.W. (ed.), Clinical Guide to Laboratory Tests (3rd ed.), 1995, pp. 286-287.

Zakim, D., and Boyer, T.D., Hepatology (2nd ed.), 1990, W.B. Saunders.

Dufour, D.R., Clinical Use of Laboratory Data: A Practical Guide, 1998, Williams & Wilkins, pp. 142-155.

Harrison's Principles of Internal Medicine (14th ed.), 1998, McGraw Hill

NCD 190.32



Wallach, J., <u>Interpretation of Diagnostic Tests</u>, 1996, Little Brown and Co. <u>Illustrated Guide to Diagnostic Tests</u> (2nd ed.), 1997, Springhouse Corporation. Sleisenger and Fordtrans's Gastrointestinal and Liver Disease (6th ed.), 1997, W.B. Saunders.



190.33 - Hepatitis Panel/Acute Hepatitis Panel

Previously Listed as Edit 22 Description

This panel consists of the following tests:

- Hepatitis A antibody (HAAb), IgM antibody;
- Hepatitis B core antibody (HBcAb), IgM antibody;
- Hepatitis B surface antigen (HBsAg) and;
- Hepatitis C antibody.

Hepatitis is an inflammation of the liver resulting from viruses, drugs, toxins, and other etiologies. Viral hepatitis can be due to one of at least five different viruses, designated hepatitis A, B, C, and E. Most cases are caused by hepatitis A virus (HAV), hepatitis B virus (HBV), or hepatitis C virus (HCV).

HAV is the most common cause of hepatitis in children and adolescents in the United States. Prior exposure is indicated by a positive IgG anti-HAV. Acute HAV is diagnosed by IgM anti-HAV, which typically appears within four weeks of exposure, and which disappears within three months of its appearance. IgG anti-HAV is similar in the timing of its appearance, but it persists indefinitely. Its detection indicates prior effective immunization or recovery from infection. Although HAV is spread most commonly by fecal-oral exposure, standard immune globulin may be effective as a prophylaxis.

HBV produces three separate antigens (surface, core, and e (envelope) antigens) when it infects the liver, although only hepatitis B surface antigen (HBsAg) is included as part of this panel. Following exposure, the body normally responds by producing antibodies to each of these antigens; one of which is included in this panel: hepatitis B surface antibody (HBsAb)-IgM antibody. HBsAg is the earlier marker, appearing in serum four to eight weeks after exposure, and typically disappearing within six months after its appearance. If HBsAg remains detectable for greater than six months, this indicates chronic HBV infection. HBcAb, in the form of both IgG and IgM antibodies, are next to appear in serum, typically becoming detectable two to three months following exposure. The IgM antibody gradually declines or disappears entirely one to two years following exposure, but the IgG usually remains detectable for life. Because HBsAg is present for a relatively short period and usually displays a low titer, a negative result does not exclude an HBV diagnosis. HBcAb, on the other hand, rises to a much higher titer and remains elevated for a longer period of time, but a positive result is not diagnostic of acute disease, since it may be the result of a prior infection. The last marker to appear in the course of a typical infection is HBsAb, which appears in serum four to six months following exposure to infected blood or body fluids; in the U.S., sexual transmission accounts for 30% to 60% of new cases of HBV infection.

The diagnosis of acute HBV infection is best established by documentation of positive IgM antibody against the core antigen (HBcAb-IgM) and by identification of a positive hepatitis B surface antigen (HBsAg). The diagnosis of chronic HBV infection is established primarily by



identifying a positive hepatitis B surface antigen (HBsAg) and demonstrating positive IgG antibody directed against the core antigen (HBcAb-IgG). Additional tests such as hepatitis B e antigen (HBeAg) and hepatitis B e antibody (HBeAb), the envelope antigen and antibody, are not included in the hepatitis panel, but may be of importance in assessing the infectivity of patients with HBV. Following completion of a HBV vaccination series, HBsAb alone may be used monthly for up to six months, or until a positive result is obtained, to verify an adequate antibody response.

HCV is the most common cause of post-transfusion hepatitis; overall HCV is responsible for 15% to 20% of all cases of acute hepatitis, and is the most common cause of chronic liver disease. The test most commonly used to identify HCV measures HCV antibodies, which appear in blood two to four months after infection. False positive HCV results can occur. For example, a patient with a recent yeast infection may produce a false positive anti-HCV result. For this reason, at present positive results usually are confirmed by a more specific technique. Like HBV, HCV is spread exclusively through exposure to infected blood or body fluids.

This panel of tests is used for differential diagnosis in a patient with symptoms of liver disease or injury. When the time of exposure or the stage of the disease is not known, a patient with continued symptoms of liver disease despite a completely negative hepatitis panel may need a repeat panel approximately two weeks to two months later to exclude the possibility of hepatitis. Once a diagnosis is established, specific tests can be used to monitor the course of the disease.

HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
80074	Acute Hepatitis Panel

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
070.0-070.9	Viral hepatitis
456.0-456.21	Esophageal varices with or without mention of bleeding
570	Acute and subacute necrosis of liver
571.5	Cirrhosis of liver without mention of alcohol
572.0	Abscess of liver
572.1	Portal pyemia
572.2	Hepatic encephalopathy
572.3	Portal hypertension
572.4	Hepatorenal syndrome
572.8	Other sequelae of chronic liver disease
573.3	Hepatitis, unspecified
780.31	Febrile convulsions (simple), unspecified
780.32	Complex febrile convulsions
780.33	Post traumatic seizures

NCD 190.33

*April 11 Changes - Red

Fu Associates, Ltd. 140 April 2011



Code	Description
780.71	Chronic fatigue syndrome
780.72	Functional quadriplegia
780.79	Other malaise and fatigue
782.4	Jaundice, unspecified, not of newborn
783.0-783.6	Symptoms concerning nutrition, metabolism, and development
787.01-787.03	Nausea and vomiting
787.04	Bilious emesis
789.00-789.09	Abdominal pain
789.1	Hepatomegaly
789.61	Localized abdominal tenderness (RUQ)
789.7	Colic
790.4	Nonspecific elevation of levels of transaminase or lactic acid dehydrogenase (LDH)
794.8	Nonspecific abnormal results of function studies, liver
996.82	Complications of transplanted organ, liver
V72.85	Liver transplant recipient evaluation

Indications

- 1. To detect viral hepatitis infection when there are abnormal liver function test results, with or without signs or symptoms of hepatitis.
- 2. Prior to and subsequent to liver transplantation.

Limitations

After a hepatitis diagnosis is established, only individual tests are needed.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Ockner, R.K., "Approaches to the diagnosis of jaundice," in Wyngaarden, J.B., and Smith, L.H. (eds.), Cecil Textbook of Medicine (18th ed.), 1988, W.B. Saunders, pp. 817-818.

Ockner, R.K., "Acute viral hepatitis," in Wyngaarden, J.B., and Smith, L.H. (eds.), Cecil Textbook of Medicine (18th ed.), 1988, W.B. Saunders, pp. 818-826.

Ockner, R.K., "Chronic hepatitis," in Wyngaarden, J.B., and Smith, L.H. (eds.), Cecil Textbook of Medicine (18th ed.), 1988, W.B. Saunders, pp. 830-834.

Arvan, D.A., "Acute viral hepatitis," in Panzer, R.J., Black, E.R., & Griner, P.F. (eds.), Diagnostic Strategies for Common Medical Problems, 1991, American College of Physicians, pp. 141-151.

Goldberg, D.M., "Diagnostic Enzymology," in Gornall, A.G. (ed.), Applied Biochemistry of Clinical Disorders (2nd ed.), 1986, J.B. Lippincott, pp. 33-51.

Pincus, M.R.,& Schaffner, J.A., "Assessment of liver function," in Henry J.B.(ed.), Clinical Diagnosis & Management by Laboratory Methods (19th ed.), 1996, W.B. Saunders, pp 253-267.

Tietz, N.W. (ed.), Clinical Guide to Laboratory Tests (3rd ed.), 1995, pp. 320-327.

Zakim, D., and Boyer, T.D., Hepatology (2nd ed.), 1990, W.B. Saunders.

Harrison's Principles of Internal Medicine (14th ed.), 1998, McGraw Hill.

NCD 190.33

*April 11 Changes – Red

Fu Associates, Ltd. 141 April 2011



Wallach, J., Interpretation of Diagnostic Tests, 1996, Little Brown and Co.

Illustrated Guide to Diagnostic Tests (2nd ed.), 1997, Springhouse Corporation.

Sleisenger and Fordtrans's Gastrointestinal and Liver Disease (6th ed.), 1997, W.B. Saunders.



190.34 - Fecal Occult Blood Test

Previously Listed as Edit 23

Description

The Fecal Occult Blood Test (FOBT) detects the presence of trace amounts of blood in stool. The procedure is performed by testing one or several small samples of one, two or three different stool specimens.

This test may be performed with or without evidence of iron deficiency anemia, which may be related to gastrointestinal blood loss. The range of causes for blood loss include inflammatory causes, including acid-peptic disease, non-steroidal anti-inflammatory drug use, hiatal hernia, Crohn's disease, ulcerative colitis, gastroenteritis, and colon ulcers. It is also seen with infectious causes, including hookworm, strongyloides, ascariasis, tuberculosis, and enteroamebiasis. Vascular causes include angiodysplasia, hemangiomas, varices, blue rubber bleb nevus syndrome, and watermelon stomach. Tumors and neoplastic causes include lymphoma, leiomyosarcoma, lipomas, adenocarcinoma and primary and secondary metastases to the GI tract. Drugs such as nonsteroidal anti-inflammatory drugs also cause bleeding. There are extra gastrointestinal causes such as hemoptysis, epistaxis, and oropharyngeal bleeding. Artifactual causes include hematuria, and menstrual bleeding. In addition, there may be other causes such as coagulopathies, gastrostomy tubes or other appliances, factitial causes, and long distance running.

Three basic types of fecal hemoglobin assays exist, each directed at a different component of the hemoglobin molecule.

- 1. Immunoassays recognize antigenic sites on the globin portion and are least affected by diet or proximal gut bleeding, but the antigen may be destroyed by fecal flora.
- 2. The heme-porphyrin assay measures heme-derived porphyrin and is least influenced by enterocolic metabolism or fecal storage. This assay does not discriminate dietary from endogenous heme. The capacity to detect proximal gut bleeding reduces its specificity for colorectal cancer screening but makes it more useful for evaluating overall GI bleeding in case finding for iron deficiency anemia.
- The guaiac-based test is the most widely used. It requires the peroxidase activity of an intact heme moiety to be reactive. Positivity rates fall with storage. Fecal hydration such as adding a drop of water increases the test reactivity but also increases false positivity.

Of these three tests, the guaiac-based test is the most sensitive for detecting lower bowel bleeding. Because of this sensitivity, it is advisable, when it is used for screening, to defer the guaiac-based test if other studies of the colon are performed prior to the test. Similarly, this test's sensitivity may result in a false positive if the patient has recently ingested meat. Both of these cautions are appropriate when the test is used for screening, but when appropriate indications are present, the test should be done despite its limitations.



HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82272	Blood, occult, by peroxidase activity (e.g., guaiac), qualitative, feces, 1-3 simultaneous determinations, performed for other than colorectal neoplasm screening

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: http://www.cms.hhs.gov/CoverageGenInfo

Code	Description
003.0	Salmonella gastroenteritis
003.1	Salmonella septicemia
004.0-004.9	Shigellosis
005.0-005.4, 005.81, 005.89,	
005.9	Other food poisoning (bacterial)
006.0-006.9	Amebiasis
007.0-007.9	Other protozoal intestinal diseases
008.41-008.49	Intestinal infections due to other specified bacteria
009.0-009.3	III-defined intestinal infections
014.00-014.86	Tuberculosis of intestines, peritoneum, and mesenteric glands
040.2	Whipple's disease
095.2	Syphilitic peritonitis
095.3	Syphilis of liver
098.0	Gonococcal infection, acute, lower genitourinary tract
098.7	Gonococcal Infection anus and rectum
098.84	Gonococcal endocaritis
123.0-123.9	Other cestode infection
124	Trichinosis
127.0-127.9	Other intestinal helminthiases
139.8	Late effects of other and unspecified infectious and parasitic diseases
150.0-157.9	Malignant neoplasm of digestive organisms
159.0-159.9	Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum
176.3	Kaposi's sarcoma, gastrointestinal sites
197.4-197.5	Secondary malignant neoplasm of intestines
197.8	Secondary malignant neoplasm of other digestive organs & spleen
199.0	Disseminated malignant neoplasm
204.00-204.01	Acute lymphoid leukemia, without mention of having achieved remission and in remission
204.02	Acute lymphoid leukemia, in relapse

NCD 190.34



Code	Description
204.10-204.11	Chronic lymphoid leukemia, without mention of having achieved remission and in remission
204.12	Chronic lymphoid leukemia, in relapse
204.20-204.21	Subacute lymphoid leukemia, without mention of having achieved remission and in remission
204.22	Subacute lymphoid leukemia, in relapse
204.80-204.81	Other lymphoid leukemia, without mention of having achieved remission and in remission
204.82	Other lymphoid leukemia, in relapse
204.90-204.91	Unspecified lymphoid leukemia, without mention of having achieved remission and in remission
204.92	Unspecified lymphoid leukemia, in relapse
205.00-205.01	Acute myeloid leukemia, without mention of having achieved remission and in remission
205.02	Acute myeloid leukemia, in relapse
205.10-205.11	Chronic myeloid leukemia, without mention of having achieved remission and in remission
205.12	Chronic myeloid leukemia, in relapse
205.20-205.21	Subacute myeloid leukemia, without mention of having achieved remission and in remission
205.22	Subacute myeloid leukemia, in relapse
205.30-205.31	Myeloid sarcoma, without mention of having achieved remission and in remission
205.32	Myeloid sarcoma, in relapse
205.80-205.81	Other myeloid leukemia, without mention of having achieved remission and in remission
205.82	Other myeloid leukemia, in relapse
205.90-205.91	Unspecified myeloid leukemia, without mention of having achieved remission and in remission
205.92	Unspecified myeloid leukemia, in relapse
206.00-206.01	Acute monocytic leukemia, without mention of having achieved remission and in remission
206.02	Acute monocytic leukemia, in relapse
206.10-206.11	Chronic monocytic leukemia, without mention of having achieved remission and in remission
206.12	Chronic monocytic leukemia, in relapse
206.20-206.21	Subacute monocytic leukemia, without mention of having achieved remission and in remission
206.22	Subacute monocytic leukemia, in relapse
206.80-206.81	Other monocytic leukemia, without mention of having achieved remission and in remission
206.82	Other monocytic leukemia, in relapse
206.90-206.91	Unspecified monocytic leukemia, without mention of having achieved remission and in remission

NCD 190.34



Code	Description
206.92	Unspecified monocytic leukemia, in relapse
207.00-207.01	Acute erythremia and erythroleukemia, without mention of having achieved remission and in remission
207.02	Acute erythremia and erythroleukemia, in relapse
207.10-207.11	Chronic erythremia, without mention of having achieved remission and in remission
207.12	Chronic erythremia, in relapse
207.20-207.21	Megakaryocytic leukemia, without mention of having achieved remission and in remission
207.22	Megakaryocytic leukemia, in relapse
207.80-207.81	Other specified leukemia, without mention of having achieved remission and in remission
207.82	Other specified leukemia, in relapse
208.00-208.01	Acute leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.02	Acute leukemia of unspecified cell type, in relapse
208.10-208.11	Chronic leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.12	Chronic leukemia of unspecified cell type, in relapse
208.20-208.21	Subacute leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.22	Subacute leukemia of unspecified cell type, in relapse
208.80-208.81	Other leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.82	Other leukemia of unspecified cell type, in relapse
208.90-208.91	Unspecified leukemia of unspecified cell type, without mention of having achieved remission and in remission
208.92	Unspecified leukemia of unspecified cell type, in relapse
209.00-209.03	Malignant carcinoid tumors of the small intestine
209.10-209.17	Malignant carcinoid tumors of the appendix, large intestine & rectum
209.40-209.43	Benign carcinoid tumors of the small intestine
209.50-209.57	Benign carcinoid tumors of the appendix, large intestine and rectum
209.70	Secondary neuroendocrine tumor, unspecified site
209.71	Secondary neuroendocrine tumor of distant lymph nodes
209.72	Secondary neuroendocrine tumor of liver
209.73	Secondary neuroendocrine tumor of bone
209.74	Secondary neuroendocrine tumor of peritoneum
209.75	Secondary Merkel cell carcinoma
209.79	Secondary neuroendocrine tumor of other sites
211.0-211.9	Benign neoplasm of other parts of digestive system
228.04	Hemangioma of intra-abdominal structures
230.2-230.9	Carcinoma in situ of digestive organs

NCD 190.34



Code	Description
235.2	Neoplasm of uncertain behavior of stomach, intestines, and rectum
235.5	Neoplasm of uncertain behavior of other & unspecified digestive organs
239.0	Neoplasm of unspecified nature, digestive system
280.0-280.9	Iron deficiency anemias
284.2	Myelophthisis
285.0-285.29	Siderblastic anemia and anemia of other chronic disease
285.3	Antineoplastic chemotherapy induced anemia
285.8-285.9	Other and unspecified anemias
286.0-286.9	Coagulation defects
287.0-287.39	Allergic purpura; qualitative platelet defects; other non- thrombocytopenic purpuras; primary thrombocytopenia
287.41	Posttransfusion purpura
287.49	Other secondary thrombocytopenia
287.5-287.9	Thrombocytopenia, unspecified; other specified and unspecified hemorrhagic conditions
338.3	Neoplasm related pain (acute) (chronic)
448.0	Hereditary hemorrhagic telangiectasia
455.0-455.8	Hemorrhoids
456.0-456.21	Esophageal varices with or without mention of bleeding
530.10-530.21, 530.3-530.7, 530.81-530.89, 530.9	Diseases of the esophagus
531.00-535.61	Gastric ulcer; duodenal ulcer; peptic ulcer, site unspecified; gastrojejunal ulcer; and gastritis and duodenitis
535.70	Eosinophilic gastritis, without mention of obstruction
535.71	Eosinophilic gastritis, with obstruction
536.2	Persistent vomiting
536.8-536.9	Dyspepsia and other specified and unspecified functional disorders of stomach
537.0-537.4	Other disorders of stomach and duodenum
537.82-537.83	Angiodysplasia of stomach and duodenum
537.84	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
537.89	Other specified disorders of stomach and duodenum
555.0-558.3	Non-infectious enteritis and colitis
558.41	Eosinophilic gastroenteritis
558.42	Eosinophilic colitis
	200mophino contro
558.9	Non-infectious enteritis and colitis
558.9 560.0-560.2	
	Non-infectious enteritis and colitis
560.0-560.2	Non-infectious enteritis and colitis Intestinal obstruction: intussusceptions, paralytic ileus, volvulus
560.0-560.2 560.30	Non-infectious enteritis and colitis Intestinal obstruction: intussusceptions, paralytic ileus, volvulus Impaction of intestine, unspecified

NCD 190.34



Code	Description
562.10-562.13	Diverticulosis/diverticulitis of colon
564.00-564.9	Functional digestive disorders, not elsewhere classified
565.0-565.1	Anal fissure and fistula
569.0	Anal and rectal polyp
569.1	Rectal prolapse
569.3	Hemorrhage of rectum and anus
569.41 - 569.44, 569.49	Other specified disorders of rectum and anus
569.82-569.83	Ulceration and perforation of intestine
569.84-569.85	Angiodysplasia of intestine with or without mention of hemorrhage
569.86	Dieulafoy lesion (hemorrhagic) of intestine
569.87	Vomiting of fecal matter
571.0 - 571.9	Chronic liver disease and cirrhosis
577.0-577.9	Diseases of the pancreas
578.0-578.9	Gastrointestinal hemorrhage
579.0	Celiac disease
579.8	Other specified intestinal malabsorption
596.1	Intestinovesical fistula
617.5	Endometriosis of intestine
780.71	Chronic fatigue syndrome
780.72	Functional quadriplegia
780.79	Other malaise and fatigue
783.0	Anorexia
783.21	Abnormal loss of weight
787.01-787.03	Nausea and vomiting
787.04	Bilious emesis
787.1	Heartburn
787.20	Dysphagia, unspecified
787.21	Dysphagia, oral phase
787.22	Dysphagia, oropharyngeal phase
787.23	Dysphagia, pharyngeal phase
787.24	Dysphagia, pharyngo-esophageal phase
787.29	Other dysphagia
787.7	Abnormal feces
787.91	Diarrhea
787.99	Other symptoms involving digestive system
789.00-789.09	Abdominal pain
789.30-789.39	Abdominal or pelvic swelling, mass, or lump
789.40-789.49	Abdominal rigidity
789.51	Malignant ascites
789.59	Other ascites
789.60-789.69	Abdominal tenderness

NCD 190.34



Code	Description
789.7	Colic
790.92	Abnormal coagulation profile
792.1	Nonspecific abnormal findings in stool contents
793.6	Nonspecific (abnormal) findings on radiological and other examination, abdominal area, including retroperitoneum
794.8	Nonspecific abnormal results of function studies, liver
863.0-863.90	Injury to gastrointestinal tract
863.91-863.95, 863.99	Injury to gastrointestinal tract
864.00-864.09	Injury to liver without mention of open wound into cavity
864.11-864.19	Injury to liver with open wound into cavity
866.00-866.03	Injury to kidney without mention of open wound into cavity
866.10-866.13	Injury to kidney with open wound into cavity
902.0 -902.9	Injury to blood vessels of abdomen and pelvis
926.11-926.19	Crushing injury of trunk, other specified sites
926.8	Crushing injury of trunk, multiple sites
926.9	Crushing injury of trunk, unspecified site
964.2	Poisoning by agents primarily affecting blood constituents, anticoagulants
995.20	Unspecified adverse effect of unspecified drug, medicinal and biological substance
995.24	Failed moderate sedation during procedure
V10.00-V10.09	Personal history of malignant neoplasm, gastrointestinal tract
V12.00	Personal history of unspecified infectious and parasitic disease
V12.72	Personal history of colonic polyps
V58.61	Long term (current) use of anticoagulants
V58.63-V58.65	Long-term (current) drug use
V58.66	Long-term (current) use of aspirin
V58.69	Long term (current) use of other medications
V67.51	Following treatment w/ high risk medication, not elsewhere specified

Indications

- 1. To evaluate known or suspected alimentary tract conditions that might cause bleeding into the intestinal tract.
- 2. To evaluate unexpected anemia.
- 3. To evaluate abnormal signs, symptoms, or complaints that might be associated with loss of blood.
- 4. To evaluate patient complaints of black or red-tinged stools.

Limitations

1. The FOBT is reported once for the testing of up to three separate specimens (comprising either one or two tests per specimen).

NCD 190.34



 In patients who are taking non-steroidal anti-inflammatory drugs and have a history of gastrointestinal bleeding but no other signs, symptoms, or complaints associated with gastrointestinal blood loss, testing for occult blood may generally be appropriate no more than once every three months.

When testing is done for the purpose of screening for colorectal cancer in the absence of signs, symptoms, conditions, or complaints associated with gastrointestinal blood loss, report the HCPCS code for colorectal cancer screening; fecal-occult blood test, 1-3 simultaneous determinations should be used.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

Ahlquist, D.A., "Approach to the patient with occult gastrointestinal bleeding," in Tadatake, Y. (ed.), Textbook of Gastroenterology (2nd ed.), 1995, J.B. Lippincott, pp. 699-717.

Tietz, N.W. (ed.), Clinical guide to Laboratory Tests (3rd ed.), 1995, pp.452-454.

Schleisenger, M.H., Wall, S.D., et al., "Part X. Gastrointestinal Diseases" in Wyngaarden, J.B., & Smith, L.H. (eds.), Cecil Textbook of Medicine (18th ed.), 1988, W.B. Saunders, pp. 656-807.

Harrison's Principles of Internal Medicine (14th ed.), 1998, McGraw Hill.

Wallach, J., Interpretation of Diagnostic Tests, 1996, Little Brown and Co.

Illustrated Guide to Diagnostic Tests (2nd ed.), 1997, Springhouse Corporation.

Sleisenger and Fordtrans's Gastrointestinal and Liver Disease (6th ed.), 1997, W.B. Saunders.