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HCUP Methods Series



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HCUP CONTACT INFORMATION

For AHRQ:

Agency for Healthcare Research and Quality
Healthcare Cost and Utilization Project (HCUP)
540 Gaither Road, 5th Floor
Rockville, Maryland 20850

Phone: (301) 427-1410

Fax: (301) 427-1430

E-mail: hcup@ahrq.gov

Website: <http://www.ahrq.gov/data/hcup/>

For Technical Assistance:

Visit the AHRQ-sponsored HCUP User Support Website at:

<http://www.hcup-us.ahrq.gov>

Or send an E-mail to HCUP User Support at:

hcup@ahrq.gov

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ABSTRACT

The Clinical Classifications Software (CCS) is a tool for clustering patient diagnoses and procedures into a manageable number of clinically meaningful categories developed at the Agency for Healthcare Research and Quality (AHRQ). CCS is used for grouping conditions and procedures without having to sort through thousands of codes. This "clinical grouper" makes it easier to quickly understand patterns of diagnoses and procedures so that health plans, policymakers, and researchers can analyze costs, utilization, and outcomes associated with particular illnesses and procedures.

CCS collapses diagnosis and procedure codes from the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM), which contains over 12,000 diagnosis codes and 3,500 procedure codes. Without CCS, the large number of ICD-9-CM codes poses difficulties in statistical analysis and reporting.

CCS consists of two related classification systems, single level and multi-level, which are designed to meet different needs. *Single-level* CCS is most useful for ranking of diagnoses and procedures and for direct integration into risk adjustment and other software. *Multi-level* CCS is most useful when evaluating larger aggregations of conditions and procedures or exploring them in greater detail.

INTRODUCTION TO THE CLINICAL CLASSIFICATIONS SOFTWARE (CCS) 2004 User's Guide

Overview

Clinical Classifications Software provides a way to classify diagnoses and procedures into a limited number of categories. CCS aggregates individual ICD-9-CM codes into broad diagnosis and procedure groups for statistical analysis and reporting. This document provides a description of the CCS categorization scheme. Electronic files containing the translation of ICD-9-CM diagnosis and procedure codes into CCS categories can be downloaded from this site. (CCS was formally called CCHPR, Clinical Classifications for Health Policy Research.)

CCS is continually updated. The current version is based on ICD-9-CM codes that are valid for January 1980 through September 2004. CCS consists of two related classification systems. The first system, called the *single level CCS*, groups diagnoses into mutually exclusive categories. The single-level diagnosis CCS aggregates illnesses and conditions into 260 mutually exclusive categories. Similarly, the single-level procedure CCS aggregates procedures into 231 mutually exclusive categories, most of which are homogeneous.

The second system expands the single-level CCS into a hierarchical system, called the *multi-level CCS*. The multi-level CCS groups single-level CCS categories into broader categories (e.g., Infectious Diseases, Mental Disorders, and Injury). It also splits single-level CCS categories to provide more detail about particular groupings of codes.

CCS documentation provides a listing of which ICD-9-CM codes are included in each CCS diagnosis and procedure category.

Purpose

CCS categories can be employed in many types of projects analyzing data on diagnoses and procedures. For example, they can be used to:

- ◆ identify cases for disease-specific or procedure-specific studies;
- ◆ gain a better understanding of an institution's or health plan's distribution of patients across disease or procedure groupings;
- ◆ provide statistical information on characteristics, such as charges and length of stay, about relatively specific conditions;
- ◆ cross-classify procedures by diagnoses to provide insight into the variety of procedures performed for particular diagnoses.

Diagnoses and procedures for hospital inpatient stays are coded using the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM), Fifth Edition (Public Health Service and Health Care Financing Administration, 1994). ICD-9-CM consists of about 12,000 diagnosis codes and 3,500 procedure codes. Although it is possible to present descriptive statistics for individual ICD-9-CM codes, it is often useful to aggregate codes into clinically meaningful categories that group similar conditions or procedures. For examples of the use of CCS categories, see Elixhauser and Steiner

(1999); Cowen et al., 1998; Elixhauser, Steiner, Whittington, et al. (1998); Elixhauser and McCarthy (1996); Duffy, Elixhauser, and Sommers (1996); and Agency for Health Care Policy and Research (1996). These reports aggregate individual hospital stays into larger diagnosis and procedure groups for statistical analysis and reporting. CCS is distinguished from other grouping schemes because it does not confound diagnosis with treatment, but keeps diagnoses and procedures separate in two different classifications.

History of Development

Clinical Classifications for Health Policy Research (CCHPR) Version 1 was the initial endeavor to construct clinically meaningful categories of diagnoses and procedures. The determining factor in creating these categories was the extent to which conditions and procedures could be grouped into relatively homogeneous clusters of interest to public policy researchers. CCHPR Version 1 consisted of 185 summary diagnosis categories and 172 summary procedure categories (Elixhauser, Andrews, and Fox, 1993).

CCHPR Version 2 was derived from the Version 1 summary diagnosis and procedure categories. Version 1 categories were modified on the basis of clinical homogeneity, frequency of occurrence in inpatient discharge data, and ICD-9-CM coding changes. The number of discharges in all categories was computed using 1991 California hospital inpatient data on all-listed diagnoses and all-listed procedures from the Healthcare Cost and Utilization Project State Inpatient Databases (SID).

The modified CCHPR schemes went through reviews during which the categories and ICD-9-CM code assignments were evaluated for accuracy and clinical significance. The reviews were conducted by trained medical records personnel and a physician with experience in medical classification. During this review process, additional categories were created, other categories were collapsed, and codes were reassigned when appropriate.

Version 2 contained more categories than Version 1. Some conglomerate categories (e.g., "Other gastrointestinal procedures") and high-frequency categories (e.g., "Pregnancy-related conditions") were divided into smaller, more clinically homogeneous groups.

Beginning with the 1999 update, an additional classification scheme (the multi-level CCS) was introduced, E codes (external causes of injury) received special treatment, and the name was changed to Clinical Classification Software (CCS), reflecting the broader use of the classifications beyond health policy research.

DESCRIPTION

Single-Level CCS

Diagnosis Codes

The single-level diagnosis classification scheme aggregates illnesses and conditions into 260 mutually exclusive categories, most of which are clinically homogeneous. Some heterogeneous categories were necessary; these combine several less common individual conditions within a body system.

All codes in the diagnosis section of ICD-9-CM are classified. In previous versions of the system, E codes (External Causes of Injury and Poisoning) were not classified because they are used sporadically in inpatient data; hence they were lumped into a single category (CCS 260). Beginning with the 1999 version of the CCS, a classification system for E codes was incorporated. The E code classification was developed by staff at the Centers for Disease and Control and Prevention (Centers for Disease Control, 1997). Examples of single-level CCS diagnosis categories are shown in Box 1.

Box 1—Examples of single-level CCS diagnosis categories		
Description	ICD-9-CM ¹ diagnosis codes used to map	CCS category
Essential Hypertension	4011 4019	98
Hypertension with complications and secondary hypertension	4010 40200 40201 40210 40211 40290 40291 4030 40300 40301 4031 40310 40311 4039 40390 40391 4040 40400 40401 40402 40403 4041 40410 40411 40412 40413 4049 40490 40491 40492 40493 40501 40509 40511 40519 40591 40599 4372	99

ICD-9-CM codes for the single-level diagnosis CCS categories are presented in Appendix A. The ICD-9-CM code assignments to each category are viewable in the accompanying executable file that provides the crosswalk from ICD-9-CM diagnosis codes to single-level CCS categories.

Labels for the single-level CCS diagnoses are available in Appendix A1.

Procedure Codes

The single-level procedure classification scheme contains 231 mutually exclusive categories. Many of the categories represent single procedures; however, some procedures that occur infrequently are grouped according to the body system on which they are performed, whether they are used for diagnostic or therapeutic purposes, and whether they are considered operating room or non-operating room procedures according to diagnosis related groups definitions (DRGs: Diagnosis related groups definitions manual, 1994). Examples of single-level CCS procedure categories are shown in Box 2.

¹ Additional information about the application of ICD-9-CM diagnosis and procedure codes can be found later in this document.

Box 2—Examples of single-level CCS procedure categories		
Description	ICD-9-CM procedure codes used to map	CCS category
Heart valve procedures	3500 3501 3502 3503 3504 3510 3511 3512 3513 3514 3520 3521 3522 3523 3524 3525 3526 3527 3528 3596 3599	43
Coronary artery bypass graft (CABG)	3610 3611 3612 3613 3614 3615 3616 3617 3619 362 363 3631 3632 3639	44

ICD-9-CM codes for the single-level procedure CCS categories are presented in Appendix B. The ICD-9-CM code assignments to each category are viewable in the accompanying executable files that provide the crosswalk from ICD-9-CM procedure codes to single-level CCS categories.

Labels for the single-level CCS procedures are available in Appendix B1.

Multi-level CCS

The multi-level CCS is a hierarchical system and is defined using both single-level CCS groupings and ICD-9-CM codes. There are four levels in the multi-level diagnosis CCS and three levels in the multi-level procedure CCS. The first of the four levels in the multi-level diagnosis CCS is broken into 17 categories. Similarly, the first of the three levels in the multi-level procedure CCS is also broken into 17 categories. These 17 categories broadly group the single-level CCS and ICD-9-CM codes into 17 body systems (e.g., “Diseases of the Circulatory System”). Note that multi-level CCS categories are comprised of single-level CCS categories or ICD-9-CM codes. Construction of multi-level CCS requires that ICD-9-CM codes first be assigned to single-level CCS.

Diagnosis Codes

The specificity of categories increases with the higher levels, such that second-level categories are more specific than first-level categories, third-level categories are more specific than second-level categories, and fourth-level categories are more specific than third-level categories.

The first-level categories are identified by one whole digit (1-17), second-level categories include 1 decimal point, third-level categories have 2 decimal places and fourth level categories have 3 decimal places.

Box 3 provides an example of multi-level CCS for diagnoses, showing how single-level CCS category 99 (from single-level CCS example in Box 1) is further subdivided into the more specific levels in the multi-level system.

Box 3—Examples of multi-level CCS diagnosis categories			
Multi-level CCS category	Description	ICD-9-CM diagnoses used to map	Single-level CCS used to map
7	Diseases of the circulatory system	--	96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121
7.1	Hypertension	--	98 99
7.1.1	Essential hypertension	--	98
7.1.2	Hypertension with complications and secondary hypertension	--	99
7.1.2.1	Hypertensive heart and/or renal disease	40200 40201 40210 40211 40290 40291 4030 40300 40301 4031 40310 40311 4039 40390 40391 4040 40400 40401 40402 40403 4041 40410 40411 40412 40413 4049 40490 40491 40492 40493	--
7.1.2.2	Other hypertensive complications	4010 40501 40509 40511 40519 40591 40599 4372	--

ICD-9-CM codes for the multi-level diagnosis CCS categories are presented in Appendix C.

Labels for the multi-level CCS diagnoses are available in Appendix C1.

Procedure Codes

There are only three levels in the multi-level procedure CCS. The specificity of the procedure categories increases with the higher levels, such that second-level categories are more specific than first-level categories and third-level categories are more specific than second-level categories.

The first-level categories are identified by one whole digit (1-17), second-level categories include 1 decimal point, and third-level categories have 2 decimal places.

Box 4 provides an example of multi-level CCS for procedures, showing how single-level CCS category 44 (from single-level CCS example in Box 2) is further subdivided into the more specific levels in the multi-level system.

Box 4—Examples of multi-level CCS procedure categories			
Multi-level CCS category	Description	ICD-9-CM diagnoses used to map	Single-level CCS used to map
7	Operations on the cardiovascular system	--	43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
7.1	Heart valve procedures	--	43
7.2	Coronary artery bypass graft (CABG)	--	44
7.2.1	Bypass of one coronary artery	3611	--
7.2.2	Bypass of two coronary arteries	3612	--
7.2.3	Bypass of three coronary arteries	3613	--
7.2.4	Bypass of four coronary arteries	3614	--
7.2.5	Other bypass of coronary arteries	3610 3615 3616 3617 3619 362 363 3631 3632 3639	--

ICD-9-CM codes for the multi-level procedure CCS categories are presented in Appendix D.

Labels for the multi-level CCS procedures are available in Appendix D1.

NOTES ABOUT ICD-9-CM CODING CHANGES

Time period covered by CCS

In order to keep abreast of yearly changes in the ICD-9-CM codes, the CCS categories are updated annually after code assignments are reviewed and agreement is reached among the developers and medical records personnel.

The ICD-9-CM codes are revised every October. New codes are added, existing codes are deleted, and definitions of current codes are changed. CCS categories are revised in response to ICD-9-CM changes. ***The 2004 version of the CCS is valid for the time period January 1980 through September 2004.*** Using these CCS categories with data outside this time period will result in misclassification of ICD-9-CM codes.

ICD-9-CM codes requiring special treatment

CCS accounts for all changes in ICD-9-CM coding definitions during this time period except for two codes whose meaning changed to such an extent that their CCS category assignment changed as well. These two codes must be explicitly assigned by the user when using older data. If you use more recent data (as described below) no special treatment is necessary. The codes are correctly assigned in the CCS program.

Assignment of these two codes requires information on the year and quarter of service. When using data that span the time periods described below, these ICD-9-CM codes must be assigned to CCS categories explicitly according to the year and quarter of the data.

- ◆ Special treatment is required for the following diagnosis code:

From January 1980 to September 1993, ICD-9-CM diagnosis code '2510 ' should appear in CCS diagnosis category 50 (Diabetes mellitus with complications).

Beginning in October 1993, ICD-9-CM diagnosis code '2510 ' appears in CCS diagnosis category 51 (Other endocrine disorders). The current CCS program assigns this code to category 51.

- ◆ Special treatment is required for the following procedure code:

From January 1980 to September 1989, ICD-9-CM procedure code '8159' should appear in CCS procedure category 153 (Hip replacement, total and partial).

Beginning in October 1989, ICD-9-CM procedure code '8159' appears in CCS procedure category 154 (Arthroplasty, other than hip or knee). The current CCS program assigns this code to category 154.

DESCRIPTION OF DOWNLOADABLE FILES

System requirements

In order to use the CCS files you will need a program (such as WinZip®) that will allow you to decompress or “unzip” files. You will also need approximately 1,500,000 bytes free on your hard drive to accommodate all the single-level CCS files. You will need approximately 1,100,000 bytes free to accommodate all the multi-level CCS files once they are unzipped.

"Unzipping" files

There are two downloadable files, both self-extracting zipped files, called CCS.EXE (for the single-level CCS) and CCS_X.EXE (for the multi-level CCS).

Single-level CCS

CCS.EXE contains two ASCII (DOS text) files that translate ICD-9-CM codes into single-level CCS categories and two ASCII (DOS text) files that provide descriptive labels for the single-level CCS categories. To use these zipped files, you must do the following:

1. Create a subdirectory (or folder) called CCS on your hard drive (e.g., MD C:\CCS).
2. Copy CCS.EXE to this subdirectory.
3. Expand the files:
 - ◆ Using DOS: At the DOS prompt within this newly created directory, type CCS and hit the enter key (C:\CCS>CCS).
 - ◆ Using Windows: Under "RUN" type C:\CCS\CCS

The self-extracting zipped file will unzip (expand for normal use) the following files. Note that the original file (CCS.EXE) will remain intact. For the single-level CCS, the translation files translate specific ICD-9-CM codes into CCS categories.

Filename	Purpose
CCS DX REF.TXT	This is a translation file that maps ICD-9-CM <u>diagnosis</u> codes into single-level CCS diagnosis categories, with full information about each ICD-9-CM code and brief CCS labels.
CCS DX LABEL.TXT	This label file contains the full descriptive single-level CCS <u>diagnosis</u> category names to use when reporting the diagnosis categories.
CCS PR REF.TXT	This is a translation file that maps ICD-9-CM <u>procedure</u> codes into single-level CCS procedure categories, with full information about each ICD-9-CM code and brief CCS labels.
CCS PR LABEL.TXT	This label file contains the full descriptive single-level CCS <u>procedure</u> category names to use when reporting the procedure categories.

Example—Diagnosis codes

Single-level CCS diagnosis category 98 is created through CCS DX REF.TXT which maps all relevant ICD-9-CM codes (see Box 1).

Example—Procedure codes

Single-level CCS procedure category 43 is created through CCS PR REF.TXT which maps all relevant ICD-9-CM codes (see Box 2).

Multi-level CCS

CCS_X.EXE contains nine ASCII (DOS text) files that translate ICD-9-CM codes into multi-level CCS categories and two ASCII (DOS text) files that provide descriptive labels for the multi-level CCS categories. To use these zipped files, you must do the following:

1. Create a subdirectory (or folder) called CCS_X on your hard drive (e.g., MD C:\CCS_X).
2. Copy CCS_X.EXE to this subdirectory.
3. Expand the files:
 - ◆ Using DOS: At the DOS prompt within this newly created directory, type CCS_X and hit the enter key (C:\CCS_X>CCS_X).
 - ◆ Using Windows: Under "RUN" type C:\CCS_X\CCS_X

The self-extracting zipped file will unzip (expand for normal use) the following files. Note that the original file (CCS_X.EXE) will remain intact. The multi-level CCS is based upon the single-level CCS, so you must first assign single-level CCS categories in your data and then multi-level CCS categories can be created. (This process is used to avoid redundancy in ICD codes and massive translation files).

The multi-level CCS format and programming syntax is made up of two types of .txt files—those files without a \$-sign in the name and those that include a \$-sign. The files with a \$-sign include individual ICD-9-CM codes into multi-level CCS categories that are not captured in the single-level CCS categories. This means, if a multi-level CCS category is defined by single-level CCS categories, it will be created through those files without a dollar sign.

If a multi-level CCS category is defined by individual ICD-9-CM codes, then it will be created through those files with a dollar sign. The first-level files are created by the .txt files with a "1" in the name, second-level files have a "2," third-level files use a "3," and the fourth-level diagnosis files include a "4."

Filename	Purpose
DXLEVEL1.TXT	This is a translation file that maps level 2 multi-level diagnosis CCS categories into level 1 multi-level CCS categories
DXLEVEL2.TXT	This is a translation file that maps single-level diagnosis CCS categories into level 2 multi-level diagnosis CCS categories
DXLEVEL3.TXT	This is a translation file that maps single-level diagnosis CCS categories into level 3 multi-level diagnosis CCS categories
\$DXLVL3.TXT	This is a translation file that maps ICD-9-CM diagnosis codes into level 3 multi-level diagnosis CCS categories
\$DXLVL4.TXT	This is a translation file that maps ICD-9-CM diagnosis codes into level 4 multi-level diagnosis CCS categories
DXMLABEL.TXT	Label file that contains the full descriptive multi-level CCS diagnosis category names to use when reporting the diagnosis categories.
PRLEVEL1.TXT	This is a translation file that maps level 2 multi-level procedure CCS categories into level 1 multi-level procedure CCS categories
PRLEVEL2.TXT	This is a translation file that maps single-level procedure CCS categories into level 2 multi-level procedure CCS categories
PRLEVEL3.TXT	This is a translation file that maps single-level procedure CCS categories into level 3 multi-level procedure CCS categories
\$PRLVL3.TXT	This is a translation file that maps ICD-9-CM procedure codes into level 3 multi-level procedure CCS categories
PRMLABEL.TXT	Label file that contains the full descriptive multi-level CCS procedure category names to use when reporting the procedure categories.

Example—Diagnosis codes

Multi-level CCS diagnosis category 7.1.2 is created through DXLEVEL3.TXT by using single-level CCS category 99—which captures all relevant ICD-9-CM codes (see Box 1).

Multi-level CCS diagnosis categories 7.1.2.1 and 7.1.2.2 are created through \$DXLVL4.TXT. Individual ICD-9-CM codes are assigned separately to the appropriate multi-level CCS diagnosis category.

Thus by running both types of text file programs (DXLEVEL3.TXT and \$DXLVL4.TXT) you will incorporate ICD-9-CM codes into each level of the multi-level CCS—either by using single-level CCS categories or the individual ICD-9-CM codes.

Example—Procedure codes

Multi-level CCS procedure category 7.2 is created through PRLEVL2.TXT by using single-level CCS category 44—which captures all relevant ICD-9-CM codes (see Box 2).

Multi-level CCS procedure categories 7.1.1—7.2.5 are created through \$PRLVL3.TXT. Individual ICD-9-CM codes are assigned separately to the appropriate multi-level CCS procedure category.

Thus by running both types of text file programs (PRLEVL2.TXT and \$PRLVL3.TXT) you will incorporate ICD-9-CM codes into each level of the multi-level CCS—either by using single-level CCS categories or the individual ICD-9-CM codes.

Using translation files

How you use the translation files will depend on the software system being used. For example, if you are using SAS, you can adapt these translations to create a SAS PROC FORMAT. If you are using SPSS, you can adapt these translations into VALUE LABELS or into a series of recodes.

Representation of ICD-9-CM diagnosis codes

In practice, ICD-9-CM diagnoses are represented by 3- to 5-character codes with explicit decimals. In the files you downloaded and in the vast majority of data files, ICD-9-CM diagnoses are represented as 5-character alphanumeric codes with implicit decimals. (Alphanumeric codes are always enclosed in quotation marks.) Examples are given below.

Condition	ICD-9-CM diagnosis code	Alphanumeric code (with implicit decimals)
Pneumococcal pneumonia	481	'481 '
Pneumonia due to Klebsiella pneumoniae	482.0	'4820 '
Pneumonia due to Escherichia coli	482.82	'48282'
Single liveborn infant, born in hospital, delivered by cesarean delivery	V30.01	'V3001'

For proper handling of diagnosis codes:

- ◆ Alphanumeric diagnosis codes must be left-justified so that there are 2 spaces following a 3-character diagnosis code and 1 space following a 4-character diagnosis code. For example--'481 '.
- ◆ Trailing blanks should never be zero-padded (filled with zeroes so that all 5 characters are filled for codes that should be 3 or 4 characters long). For example--'481 ' should not be changed to '48100'.
- ◆ Lending zeroes must be preserved; they are significant.

Representation of ICD-9-CM procedure codes

In practice, ICD-9-CM procedures are represented by 3- or 4-character codes with explicit decimals. In the accompanying files and in the vast majority of data files, ICD-9-CM procedures are represented as 4-character alphanumeric codes with implicit decimals. (Alphanumeric codes are always enclosed in quotation marks.) Examples are given below.

Condition	ICD-9-CM procedure code	Alphanumeric code (with implicit decimals)
Incision of prostate	60.0	'600 '
Closed biopsy of prostate	60.11	'6011'

For proper handling of procedure codes:

- ◆ Alphanumeric procedure codes must be left-justified, so that there is always 1 space following a 3-character procedure code. For example--'600 '
- ◆ Trailing blanks should never be zero-padded (filled with zeroes so that all 4 characters are filled for codes that should be 3 characters long). For example--'600 ' should not be changed to '6000'.
- ◆ Lending zeroes must be preserved; they are significant.

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Appendix 1

Single-Level CCS – Diagnoses

CATEGORY LABELS

- 1 Tuberculosis
- 2 Septicemia (except in labor)
- 3 Bacterial infection; unspecified site
- 4 Mycoses
- 5 HIV infection
- 6 Hepatitis
- 7 Viral infection
- 8 Other infections; including parasitic
- 9 Sexually transmitted infections (not HIV or hepatitis)
- 10 Immunizations and screening for infectious disease
- 11 Cancer of head and neck
- 12 Cancer of esophagus
- 13 Cancer of stomach
- 14 Cancer of colon
- 15 Cancer of rectum and anus
- 16 Cancer of liver and intrahepatic bile duct
- 17 Cancer of pancreas
- 18 Cancer of other GI organs; peritoneum
- 19 Cancer of bronchus; lung
- 20 Cancer; other respiratory and intrathoracic
- 21 Cancer of bone and connective tissue
- 22 Melanomas of skin
- 23 Other non-epithelial cancer of skin
- 24 Cancer of breast
- 25 Cancer of uterus
- 26 Cancer of cervix
- 27 Cancer of ovary
- 28 Cancer of other female genital organs
- 29 Cancer of prostate
- 30 Cancer of testis
- 31 Cancer of other male genital organs
- 32 Cancer of bladder
- 33 Cancer of kidney and renal pelvis
- 34 Cancer of other urinary organs
- 35 Cancer of brain and nervous system
- 36 Cancer of thyroid
- 37 Hodgkin`s disease
- 38 Non-Hodgkin`s lymphoma
- 39 Leukemias
- 40 Multiple myeloma
- 41 Cancer; other and unspecified primary
- 42 Secondary malignancies
- 43 Malignant neoplasm without specification of site
- 44 Neoplasms of unspecified nature or uncertain behavior

- 45 Maintenance chemotherapy; radiotherapy
- 46 Benign neoplasm of uterus
- 47 Other and unspecified benign neoplasm
- 48 Thyroid disorders
- 49 Diabetes mellitus without complication
- 50 Diabetes mellitus with complications
- 51 Other endocrine disorders
- 52 Nutritional deficiencies
- 53 Disorders of lipid metabolism
- 54 Gout and other crystal arthropathies
- 55 Fluid and electrolyte disorders
- 56 Cystic fibrosis
- 57 Immunity disorders
- 58 Other nutritional; endocrine; and metabolic disorders
- 59 Deficiency and other anemia
- 60 Acute posthemorrhagic anemia
- 61 Sickle cell anemia
- 62 Coagulation and hemorrhagic disorders
- 63 Diseases of white blood cells
- 64 Other hematologic conditions
- 65 Mental retardation
- 66 Alcohol-related mental disorders
- 67 Substance-related mental disorders
- 68 Senility and organic mental disorders
- 69 Affective disorders
- 70 Schizophrenia and related disorders
- 71 Other psychoses
- 72 Anxiety; somatoform; dissociative; and personality disorders
- 73 Preadult disorders
- 74 Other mental conditions
- 75 Personal history of mental disorder; mental and behavioral problems;
observation and screening for mental condition
- 76 Meningitis (except that caused by tuberculosis or sexually
transmitted disease)
- 77 Encephalitis (except that caused by tuberculosis or sexually transmitted
disease)
- 78 Other CNS infection and poliomyelitis
- 79 Parkinson's disease
- 80 Multiple sclerosis
- 81 Other hereditary and degenerative nervous system conditions
- 82 Paralysis
- 83 Epilepsy; convulsions
- 84 Headache; including migraine
- 85 Coma; stupor; and brain damage
- 86 Cataract
- 87 Retinal detachments; defects; vascular occlusion; and retinopathy
- 88 Glaucoma
- 89 Blindness and vision defects
- 90 Inflammation; infection of eye (except that caused by tuberculosis or
sexually transmitted disease)

- 91 Other eye disorders
- 92 Otitis media and related conditions
- 93 Conditions associated with dizziness or vertigo
- 94 Other ear and sense organ disorders
- 95 Other nervous system disorders
- 96 Heart valve disorders
- 97 Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by tuberculosis or sexually transmitted disease)
- 98 Essential hypertension
- 99 Hypertension with complications and secondary hypertension
- 100 Acute myocardial infarction
- 101 Coronary atherosclerosis and other heart disease
- 102 Nonspecific chest pain
- 103 Pulmonary heart disease
- 104 Other and ill-defined heart disease
- 105 Conduction disorders
- 106 Cardiac dysrhythmias
- 107 Cardiac arrest and ventricular fibrillation
- 108 Congestive heart failure; nonhypertensive
- 109 Acute cerebrovascular disease
- 110 Occlusion or stenosis of precerebral arteries
- 111 Other and ill-defined cerebrovascular disease
- 112 Transient cerebral ischemia
- 113 Late effects of cerebrovascular disease
- 114 Peripheral and visceral atherosclerosis
- 115 Aortic; peripheral; and visceral artery aneurysms
- 116 Aortic and peripheral arterial embolism or thrombosis
- 117 Other circulatory disease
- 118 Phlebitis; thrombophlebitis and thromboembolism
- 119 Varicose veins of lower extremity
- 120 Hemorrhoids
- 121 Ther diseases of veins and lymphatics
- 122 Pneumonia (except that caused by tuberculosis or sexually transmitted disease)
- 123 Influenza
- 124 Acute and chronic tonsillitis
- 125 Acute bronchitis
- 126 Other upper respiratory infections
- 127 Chronic obstructive pulmonary disease and bronchiectasis
- 128 Asthma
- 129 Aspiration pneumonitis; food/vomitus
- 130 Pleurisy; pneumothorax; pulmonary collapse
- 131 Respiratory failure; insufficiency; arrest (adult)
- 132 Lung disease due to external agents
- 133 Other lower respiratory disease
- 134 Other upper respiratory disease
- 135 Intestinal infection
- 136 Disorders of teeth and jaw
- 137 Diseases of mouth; excluding dental
- 138 Esophageal disorders

- 139 Gastroduodenal ulcer (except hemorrhage)
- 140 Gastritis and duodenitis
- 141 Other disorders of stomach and duodenum
- 142 Appendicitis and other appendiceal conditions
- 143 Abdominal hernia
- 144 Regional enteritis and ulcerative colitis
- 145 Intestinal obstruction without hernia
- 146 Diverticulosis and diverticulitis
- 147 Anal and rectal conditions
- 148 Peritonitis and intestinal abscess
- 149 Biliary tract disease
- 150 Liver disease; alcohol-related
- 151 Other liver diseases
- 152 Pancreatic disorders (not diabetes)
- 153 Gastrointestinal hemorrhage
- 154 Noninfectious gastroenteritis
- 155 Other gastrointestinal disorders
- 156 Nephritis; nephrosis; renal sclerosis
- 157 Acute and unspecified renal failure
- 158 Chronic renal failure
- 159 Urinary tract infections
- 160 Calculus of urinary tract
- 161 Other diseases of kidney and ureters
- 162 Other diseases of bladder and urethra
- 163 Genitourinary symptoms and ill-defined conditions
- 164 Hyperplasia of prostate
- 165 Inflammatory conditions of male genital organs
- 166 Other male genital disorders
- 167 Nonmalignant breast conditions
- 168 Inflammatory diseases of female pelvic organs
- 169 Endometriosis
- 170 Prolapse of female genital organs
- 171 Menstrual disorders
- 172 Ovarian cyst
- 173 Menopausal disorders
- 174 Female infertility
- 175 Other female genital disorders
- 176 Contraceptive and procreative management
- 177 Spontaneous abortion
- 178 Induced abortion
- 179 Postabortion complications
- 180 Ectopic pregnancy
- 181 Other complications of pregnancy
- 182 Hemorrhage during pregnancy; abruptio placenta; placenta previa
- 183 Hypertension complicating pregnancy; childbirth and the puerperium
- 184 Early or threatened labor
- 185 Prolonged pregnancy
- 186 Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium
- 187 Malposition; malpresentation

188 Fetopelvic disproportion; obstruction
189 Previous C-section
190 Fetal distress and abnormal forces of labor
191 Polyhydramnios and other problems of amniotic cavity
192 Umbilical cord complication
193 Trauma to perineum and vulva
194 Forceps delivery
195 Other complications of birth; puerperium affecting management of mother
196 Normal pregnancy and/or delivery
197 Skin and subcutaneous tissue infections
198 Other inflammatory condition of skin
199 Chronic ulcer of skin
200 Other skin disorders
201 Infective arthritis and osteomyelitis (except that caused by tuberculosis or sexually transmitted disease)
202 Rheumatoid arthritis and related disease
203 Osteoarthritis
204 Other non-traumatic joint disorders
205 Spondylosis; intervertebral disc disorders; other back problems
206 Osteoporosis
207 Pathological fracture
208 Acquired foot deformities
209 Other acquired deformities
210 Systemic lupus erythematosus and connective tissue disorders
211 Other connective tissue disease
212 Other bone disease and musculoskeletal deformities
213 Cardiac and circulatory congenital anomalies
214 Digestive congenital anomalies
215 Genitourinary congenital anomalies
216 Nervous system congenital anomalies
217 Other congenital anomalies
218 Liveborn
219 Short gestation; low birth weight; and fetal growth retardation
220 Intrauterine hypoxia and birth asphyxia
221 Respiratory distress syndrome
222 Hemolytic jaundice and perinatal jaundice
223 Birth trauma
224 Other perinatal conditions
225 Joint disorders and dislocations; trauma-related
226 Fracture of neck of femur (hip)
227 Spinal cord injury
228 Skull and face fractures
229 Fracture of upper limb
230 Fracture of lower limb
231 Other fractures
232 Sprains and strains
233 Intracranial injury
234 Crushing injury or internal injury
235 Open wounds of head; neck; and trunk
236 Open wounds of extremities

237 Complication of device; implant or graft
 238 Complications of surgical procedures or medical care
 239 Superficial injury; contusion
 240 Burns
 241 Poisoning by psychotropic agents
 242 Poisoning by other medications and drugs
 243 Poisoning by nonmedicinal substances
 244 Other injuries and conditions due to external causes
 245 Syncope
 246 Fever of unknown origin
 247 Lymphadenitis
 248 Gangrene
 249 Shock
 250 Nausea and vomiting
 251 Abdominal pain
 252 Malaise and fatigue
 253 Allergic reactions
 254 Rehabilitation care; fitting of prostheses; and adjustment of devices
 255 Administrative/social admission
 256 Medical examination/evaluation
 257 Other aftercare
 258 Other screening for suspected conditions (not mental disorders
 or infectious disease)
 259 Residual codes; unclassified
 260 E Codes: All (external causes of injury and poisoning)
 2601 E Codes: Cut/pierceb
 2602 E Codes: Drowning/submersion
 2603 E Codes: Fall
 2604 E Codes: Fire/burn
 2605 E Codes: Firearm
 2606 E Codes: Machinery
 2607 E Codes: Motor vehicle traffic (MVT)
 2608 E Codes: Pedal cyclist; not MVT
 2609 E Codes: Pedestrian; not MVT
 2610 E Codes: Transport; not MVT
 2611 E Codes: Natural/environment
 2612 E Codes: Overexertion
 2613 E Codes: Poisoning
 2614 E Codes: Struck by; against
 2615 E Codes: Suffocation
 2616 E Codes: Adverse effects of medical care
 2617 E Codes: Adverse effects of medical drugs
 2618 E Codes: Other specified and classifiable
 2619 E Codes: Other specified; NEC
 2620 E Codes: Unspecified
 2621 E Codes: Place of occurrence

Appendix 2

Single-Level CCS - Procedures

CATEGORY LABELS

- 1 Incision and excision of CNS
- 2 Insertion; replacement; or removal of extracranial ventricular shunt
- 3 Laminectomy; excision intervertebral disc
- 4 Diagnostic spinal tap
- 5 Insertion of catheter or spinal stimulator and injection into spinal canal
- 6 Decompression peripheral nerve
- 7 Other diagnostic nervous system procedures
- 8 Other non-OR or closed therapeutic nervous system procedures
- 9 Other OR therapeutic nervous system procedures
- 10 Thyroidectomy; partial or complete
- 11 Diagnostic endocrine procedures
- 12 Other therapeutic endocrine procedures
- 13 Corneal transplant
- 14 Glaucoma procedures
- 15 Lens and cataract procedures
- 16 Repair of retinal tear; detachment
- 17 Destruction of lesion of retina and choroid
- 18 Diagnostic procedures on eye
- 19 Other therapeutic procedures on eyelids; conjunctiva; cornea
- 20 Other intraocular therapeutic procedures
- 21 Other extraocular muscle and orbit therapeutic procedures
- 22 Tympanoplasty
- 23 Myringotomy
- 24 Mastoidectomy
- 25 Diagnostic procedures on ear
- 26 Other therapeutic ear procedures
- 27 Control of epistaxis
- 28 Plastic procedures on nose
- 29 Dental procedures
- 30 Tonsillectomy and/or adenoidectomy
- 31 Diagnostic procedures on nose; mouth and pharynx
- 32 Other non-OR therapeutic procedures on nose; mouth and pharynx
- 33 Other OR therapeutic procedures on nose; mouth and pharynx
- 34 Tracheostomy; temporary and permanent
- 35 Tracheoscopy and laryngoscopy with biopsy
- 36 Lobectomy or pneumonectomy
- 37 Diagnostic bronchoscopy and biopsy of bronchus
- 38 Other diagnostic procedures on lung and bronchus
- 39 Incision of pleura; thoracentesis; chest drainage
- 40 Other diagnostic procedures of respiratory tract and mediastinum
- 41 Other non-OR therapeutic procedures on respiratory system
- 42 Other OR therapeutic procedures on respiratory system

- 43 Heart valve procedures
- 44 Coronary artery bypass graft (CABG)
- 45 Percutaneous transluminal coronary angioplasty (PTCA)
- 46 Coronary thrombolysis
- 47 Diagnostic cardiac catheterization; coronary arteriography
- 48 Insertion; revision; replacement; removal of cardiac pacemaker
or cardioverter/defibrillator
- 49 Other OR heart procedures
- 50 Extracorporeal circulation auxiliary to open heart procedures
- 51 Endarterectomy; vessel of head and neck
- 52 Aortic resection; replacement or anastomosis
- 53 Varicose vein stripping; lower limb
- 54 Other vascular catheterization; not heart
- 55 Peripheral vascular bypass
- 56 Other vascular bypass and shunt; not heart
- 57 Creation; revision and removal of arteriovenous fistula or vessel-to-vessel
cannula for dialysis
- 58 Hemodialysis
- 59 Other OR procedures on vessels of head and neck
- 60 Embolectomy and endarterectomy of lower limbs
- 61 Other OR procedures on vessels other than head and neck
- 62 Other diagnostic cardiovascular procedures
- 63 Other non-OR therapeutic cardiovascular procedures
- 64 Bone marrow transplant
- 65 Bone marrow biopsy
- 66 Procedures on spleen
- 67 Other therapeutic procedures; hemic and lymphatic system
- 68 Injection or ligation of esophageal varices
- 69 Esophageal dilatation
- 70 Upper gastrointestinal endoscopy; biopsy
- 71 Gastrostomy; temporary and permanent
- 72 Colostomy; temporary and permanent
- 73 Ileostomy and other enterostomy
- 74 Gastrectomy; partial and total
- 75 Small bowel resection
- 76 Colonoscopy and biopsy
- 77 Proctoscopy and anorectal biopsy
- 78 Colorectal resection
- 79 Local excision of large intestine lesion (not endoscopic)
- 80 Appendectomy
- 81 Hemorrhoid procedures
- 82 Endoscopic retrograde cannulation of pancreas (ERCP)
- 83 Biopsy of liver
- 84 Cholecystectomy and common duct exploration
- 85 Inguinal and femoral hernia repair
- 86 Other hernia repair
- 87 Laparoscopy

- 88 Abdominal paracentesis
- 89 Exploratory laparotomy
- 90 Excision; lysis peritoneal adhesions
- 91 Peritoneal dialysis
- 92 Other bowel diagnostic procedures
- 93 Other non-OR upper GI therapeutic procedures
- 94 Other OR upper GI therapeutic procedures
- 95 Other non-OR lower GI therapeutic procedures
- 96 Other OR lower GI therapeutic procedures
- 97 Other gastrointestinal diagnostic procedures
- 98 Other non-OR gastrointestinal therapeutic procedures
- 99 Other OR gastrointestinal therapeutic procedures
- 100 Endoscopy and endoscopic biopsy of the urinary tract
- 101 Transurethral excision; drainage; or removal urinary obstruction
- 102 Ureteral catheterization
- 103 Nephrotomy and nephrostomy
- 104 Nephrectomy; partial or complete
- 105 Kidney transplant
- 106 Genitourinary incontinence procedures
- 107 Extracorporeal lithotripsy; urinary
- 108 Indwelling catheter
- 109 Procedures on the urethra
- 110 Other diagnostic procedures of urinary tract
- 111 Other non-OR therapeutic procedures of urinary tract
- 112 Other OR therapeutic procedures of urinary tract
- 113 Transurethral resection of prostate (TURP)
- 114 Open prostatectomy
- 115 Circumcision
- 116 Diagnostic procedures; male genital
- 117 Other non-OR therapeutic procedures; male genital
- 118 Other OR therapeutic procedures; male genital
- 119 Oophorectomy; unilateral and bilateral
- 120 Other operations on ovary
- 121 Ligation of fallopian tubes
- 122 Removal of ectopic pregnancy
- 123 Other operations on fallopian tubes
- 124 Hysterectomy; abdominal and vaginal
- 125 Other excision of cervix and uterus
- 126 Abortion (termination of pregnancy)
- 127 Dilatation and curettage (D&C); aspiration after delivery or abortion
- 128 Diagnostic dilatation and curettage (D&C)
- 129 Repair of cystocele and rectocele; obliteration of vaginal vault
- 130 Other diagnostic procedures; female organs
- 131 Other non-OR therapeutic procedures; female organs
- 132 Other OR therapeutic procedures; female organs
- 133 Episiotomy
- 134 Cesarean section

135 Forceps; vacuum; and breech delivery
136 Artificial rupture of membranes to assist delivery
137 Other procedures to assist delivery
138 Diagnostic amniocentesis
139 Fetal monitoring
140 Repair of current obstetric laceration
141 Other therapeutic obstetrical procedures
142 Partial excision bone
143 Bunionectomy or repair of toe deformities
144 Treatment; facial fracture or dislocation
145 Treatment; fracture or dislocation of radius and ulna
146 Treatment; fracture or dislocation of hip and femur
147 Treatment; fracture or dislocation of lower extremity (other than hip or femur)
148 Other fracture and dislocation procedure
149 Arthroscopy
150 Division of joint capsule; ligament or cartilage
151 Excision of semilunar cartilage of knee
152 Arthroplasty knee
153 Hip replacement; total and partial
154 Arthroplasty other than hip or knee
155 Arthrocentesis
156 Injections and aspirations of muscles; tendons; bursa; joints and soft tissue
157 Amputation of lower extremity
158 Spinal fusion
159 Other diagnostic procedures on musculoskeletal system
160 Other therapeutic procedures on muscles and tendons
161 Other OR therapeutic procedures on bone
162 Other OR therapeutic procedures on joints
163 Other non-OR therapeutic procedures on musculoskeletal system
164 Other OR therapeutic procedures on musculoskeletal system
165 Breast biopsy and other diagnostic procedures on breast
166 Lumpectomy; quadrantectomy of breast
167 Mastectomy
168 Incision and drainage; skin and subcutaneous tissue
169 Debridement of wound; infection or burn
170 Excision of skin lesion
171 Suture of skin and subcutaneous tissue
172 Skin graft
173 Other diagnostic procedures on skin and subcutaneous tissue
174 Other non-OR therapeutic procedures on skin and breast
175 Other OR therapeutic procedures on skin and breast
176 Other organ transplantation
177 Computerized axial tomography (CT) scan head
178 CT scan chest
179 CT scan abdomen
180 Other CT scan
181 Myelogram

182	Mammography
183	Routine chest X-ray
184	Intraoperative cholangiogram
185	Upper gastrointestinal X-ray
186	Lower gastrointestinal X-ray
187	Intravenous pyelogram
188	Cerebral arteriogram
189	Contrast aortogram
190	Contrast arteriogram of femoral and lower extremity arteries
191	Arterio- or venogram (not heart and head)
192	Diagnostic ultrasound of head and neck
193	Diagnostic ultrasound of heart (echocardiogram)
194	Diagnostic ultrasound of gastrointestinal tract
195	Diagnostic ultrasound of urinary tract
196	Diagnostic ultrasound of abdomen or retroperitoneum
197	Other diagnostic ultrasound
198	Magnetic resonance imaging
199	Electroencephalogram (EEG)
200	Nonoperative urinary system measurements
201	Cardiac stress tests
202	Electrocardiogram
203	Electrographic cardiac monitoring
204	Swan-Ganz catheterization for monitoring
205	Arterial blood gases
206	Microscopic examination (bacterial smear; culture; toxicology)
207	Radioisotope bone scan
208	Radioisotope pulmonary scan
209	Radioisotope scan and function studies
210	Other radioisotope scan
211	Therapeutic radiology
212	Diagnostic physical therapy
213	Physical therapy exercises; manipulation; and other procedures
214	Traction; splints; and other wound care
215	Other physical therapy and rehabilitation
216	Respiratory intubation and mechanical ventilation
217	Other respiratory therapy
218	Psychological and psychiatric evaluation and therapy
219	Alcohol and drug rehabilitation/detoxification
220	Ophthalmologic and otologic diagnosis and treatment
221	Nasogastric tube
222	Blood transfusion
223	Enteral and parenteral nutrition
224	Cancer chemotherapy
225	Conversion of cardiac rhythm
226	Other diagnostic radiology and related techniques
227	Other diagnostic procedures (interview; evaluation; consultation)
228	Prophylactic vaccinations and inoculations

- 229 Nonoperative removal of foreign body
- 230 Extracorporeal shock wave lithotripsy; other than urinary
- 231 Other therapeutic procedures

Appendix 3

Multi-Level CCS – Diagnoses

MULTI-LEVEL

CATEGORY LABELS [Single-Level CCS Diagnosis Category]

- 1 Infectious and parasitic diseases
 - 1.1 Bacterial infection
 - 1.1.1 Tuberculosis [1]
 - 1.1.2 Septicemia (except in labor) [2]
 - 1.1.2.1 Streptococcal septicemia
 - 1.1.2.2 Staphylococcal septicemia
 - 1.1.2.3 E Coli septicemia
 - 1.1.2.4 Other gram negative septicemia
 - 1.1.2.5 Other specified septicemia
 - 1.1.2.6 Unspecified septicemia
 - 1.1.3 Sexually transmitted infections (not HIV or hepatitis) [9]
 - 1.1.4 Other bacterial infections [3]
 - 1.2 Mycoses [4]
 - 1.2.1 Candidiasis of the mouth (thrush)
 - 1.2.2 Other mycoses
 - 1.3 Viral infection
 - 1.3.1 HIV infection [5]
 - 1.3.2 Hepatitis [6]
 - 1.3.3 Other viral infections [7]
 - 1.3.3.1 Herpes zoster infection
 - 1.3.3.2 Herpes simplex infection
 - 1.3.3.3 Other and unspecified viral infection
 - 1.4 Other infections; including parasitic [8]
 - 1.5 Immunizations and screening for infectious disease [10]
- 2 Neoplasms
 - 2.1 Colorectal cancer
 - 2.1.1 Cancer of colon [14]
 - 2.1.2 Cancer of rectum and anus [15]
 - 2.2 Other gastrointestinal cancer
 - 2.2.1 Cancer of esophagus [12]
 - 2.2.2 Cancer of stomach [13]
 - 2.2.3 Cancer of liver and intrahepatic bile duct [16]
 - 2.2.4 Cancer of pancreas [17]
 - 2.2.5 Cancer of other GI organs; peritoneum [18]
 - 2.3 Cancer of bronchus; lung [19]
 - 2.4 Cancer of skin
 - 2.4.1 Melanomas of skin [22]
 - 2.4.2 Other non-epithelial cancer of skin [23]
 - 2.5 Cancer of breast [24]
 - 2.6 Cancer of uterus and cervix
 - 2.6.1 Cancer of uterus [25]
 - 2.6.2 Cancer of cervix [26]

- 2.7 Cancer of ovary and other female genital organs
 - 2.7.1 Cancer of ovary [27]
 - 2.7.2 Cancer of other female genital organs [28]
- 2.8 Cancer of male genital organs
 - 2.8.1 Cancer of prostate [29]
 - 2.8.2 Cancer of testis [30]
 - 2.8.3 Cancer of other male genital organs [31]
- 2.9 Cancer of urinary organs
 - 2.9.1 Cancer of bladder [32]
 - 2.9.2 Cancer of kidney and renal pelvis [33]
 - 2.9.3 Cancer of other urinary organs [34]
- 2.1 Cancer of lymphatic and hematopoietic tissue
 - 2.10.1 Hodgkins disease [37]
 - 2.10.2 Non-Hodgkins lymphoma [38]
 - 2.10.3 Leukemias [39]
 - 2.10.4 Multiple myeloma [40]
- 2.11 Cancer; other primary
 - 2.11.1 Cancer of head and neck [11]
 - 2.11.2 Cancer; other respiratory and intrathoracic [20]
 - 2.11.3 Cancer of bone and connective tissue [21]
 - 2.11.4 Cancer of brain and nervous system [35]
 - 2.11.5 Cancer of thyroid [36]
 - 2.11.6 Cancer; other and unspecified primary [41]
- 2.12 Secondary malignancies [42]
 - 2.12.1 Secondary malignancy of lymph nodes
 - 2.12.2 Secondary malignancy of lung
 - 2.12.3 Secondary malignancy of liver
 - 2.12.4 Secondary malignancy of brain/spine
 - 2.12.5 Secondary malignancy of bone
 - 2.12.6 Other secondary malignancy
- 2.13 Malignant neoplasm without specification of site [43]
- 2.14 Neoplasms of unspecified nature or uncertain behavior [44]
- 2.15 Maintenance chemotherapy; radiotherapy [45]
 - 2.15.1 Radiotherapy
 - 2.15.2 Chemotherapy
- 2.16 Benign neoplasms
 - 2.16.1 Benign neoplasm of uterus [46]
 - 2.16.2 Other and unspecified benign neoplasm [47]
 - 2.16.2.1 Benign neoplasm of ovary
 - 2.16.2.2 Benign neoplasm of colon
 - 2.16.2.3 Benign neoplasm of the thyroid
 - 2.16.2.4 Benign neoplasm of cerebral meninges
 - 2.16.2.5 Other and unspecified benign neoplasms
- 3 Endocrine; nutritional; and metabolic diseases and immunity disorders
 - 3.1 Thyroid disorders [48]
 - 3.1.1 Thyrotoxicosis with or without goiter
 - 3.1.2 Other thyroid disorders
 - 3.2 Diabetes mellitus without complication [49]
 - 3.3 Diabetes mellitus with complications [50]
 - 3.3.1 Diabetes with ketoacidosis or uncontrolled diabetes

- 3.3.2 Diabetes with renal manifestations
- 3.3.3 Diabetes with ophthalmic manifestations
- 3.3.4 Diabetes with neurological manifestations
- 3.3.5 Diabetes with circulatory manifestations
- 3.3.6 Diabetes with unspecified complications
- 3.3.7 Diabetes with other manifestations
- 3.4 Other endocrine disorders [51]
- 3.5 Nutritional deficiencies [52]
- 3.5.1 Unspecified protein-calorie malnutrition
- 3.5.2 Other malnutrition
- 3.6 Disorders of lipid metabolism [53]
- 3.7 Gout and other crystal arthropathies [54]
- 3.8 Fluid and electrolyte disorders [55]
- 3.8.1 Hyposmolality
- 3.8.2 Hypovolemia
- 3.8.3 Hyperpotassemia
- 3.8.4 Hypopotassemia
- 3.8.5 Other fluid and electrolyte disorders
- 3.9 Cystic fibrosis [56]
- 3.1 Immunity disorders [57]
- 3.11 Other nutritional; endocrine; and metabolic disorders [58]
- 3.11.1 Disorders of mineral metabolism
- 3.11.2 Obesity
- 3.11.3 Other and unspecified metabolic; nutritional; and endocrine disorders
- 4 Diseases of the blood and blood-forming organs
- 4.1 Anemia
- 4.1.1 Acute posthemorrhagic anemia [60]
- 4.1.2 Sickle cell anemia [61]
- 4.1.3 Deficiency and other anemia [59]
- 4.1.3.1 Iron deficiency anemia
- 4.1.3.2 Other deficiency anemia
- 4.1.3.3 Aplastic anemia
- 4.1.3.4 Chronic blood loss anemia
- 4.1.3.5 Acquired hemolytic anemia
- 4.1.3.6 Other specified anemia
- 4.1.3.7 Anemia; unspecified
- 4.2 Coagulation and hemorrhagic disorders [62]
- 4.2.1 Coagulation defects
- 4.2.2 Thrombocytopenia
- 4.2.3 Other coagulation and hemorrhagic disorders
- 4.3 Diseases of white blood cells [63]
- 4.4 Other hematologic conditions [64]
- 5 Mental disorders
- 5.1 Mental retardation [65]
- 5.2 Alcohol and substance-related mental disorders
- 5.2.1 Alcohol-related mental disorders [66]
- 5.2.1.1 Acute alcoholic intoxication
- 5.2.1.2 Other and unspecified alcohol dependence
- 5.2.1.3 Nondependent alcohol abuse
- 5.2.1.4 Other alcohol-related mental disorders

- 5.2.2 Substance-related mental disorders [67]
 - 5.2.2.1 Opioid dependence
 - 5.2.2.2 Cocaine dependence
 - 5.2.2.3 Other; combined; and unspecified drug dependence
 - 5.2.2.4 Cocaine abuse
 - 5.2.2.5 Other; mixed; or unspecified drug abuse
 - 5.2.2.6 Other substance-related mental disorders
- 5.3 Senility and organic mental disorders [68]
 - 5.3.1 Senile dementia; uncomplicated
 - 5.3.2 Arteriosclerotic dementia
 - 5.3.3 Transient organic psychotic conditions
 - 5.3.4 Specific nonpsychotic mental disorders due to organic brain damage
 - 5.3.5 Presenile dementia; uncomplicated
 - 5.3.6 Senile dementia with delirium
 - 5.3.7 Other senility and organic mental disorders
- 5.4 Affective disorders [69]
 - 5.4.1 Major depressive disorder; single episode
 - 5.4.2 Major depressive disorder; recurrent episode
 - 5.4.3 Neurotic depression
 - 5.4.4 Bipolar affective disorder
 - 5.4.5 Manic-depressive psychosis
 - 5.4.6 Other affective disorders
- 5.5 Schizophrenia and related disorders [70]
 - 5.5.1 Paranoid schizophrenia
 - 5.5.2 Schizo-affective type
 - 5.5.3 Other schizophrenia
- 5.6 Other psychoses [71]
- 5.7 Anxiety; somatoform; dissociative; and personality disorders [72]
 - 5.7.1 Anxiety states
 - 5.7.2 Personality disorders
 - 5.7.3 Other anxiety; somatoform; dissociative; and personality disorders
- 5.8 Preadult disorders [73]
- 5.9 Other mental conditions [74]
 - 5.9.1 Adjustment reaction
 - 5.9.1.1 Brief depressive reaction
 - 5.9.1.2 Other adjustment reaction
 - 5.9.2 Depressive disorder; not elsewhere classified
 - 5.9.3 Other and unspecified mental conditions
- 5.1 Personal history of mental disorder; screening for mental condition [75]
- 6 Diseases of the nervous system and sense organs
 - 6.1 Central nervous system infection
 - 6.1.1 Meningitis (except that caused by TB or STD) [76]
 - 6.1.2 Encephalitis (except that caused by TB or STD) [77]
 - 6.1.3 Other CNS infection and poliomyelitis [78]
 - 6.2 Hereditary and degenerative nervous system conditions
 - 6.2.1 Parkinsons disease [79]
 - 6.2.2 Multiple sclerosis [80]
 - 6.2.3 Other hereditary and degenerative nervous system conditions [81]
 - 6.2.3.1 Disorders of the autonomic nervous system
 - 6.2.3.2 Other and unspecified hereditary and degenerative nervous conditions

- 6.3 Paralysis [82]
 - 6.3.1 Hemiplegia
 - 6.3.2 Other paralysis
- 6.4 Epilepsy; convulsions [83]
 - 6.4.1 Epilepsy
 - 6.4.2 Convulsions
- 6.5 Headache; including migraine [84]
 - 6.5.1 Migraine
 - 6.5.2 Other headache
- 6.6 Coma; stupor; and brain damage [85]
- 6.7 Eye disorders
 - 6.7.1 Cataract [86]
 - 6.7.2 Retinal detachments; defects; vascular occlusion; and retinopathy [87]
 - 6.7.2.1 Retinal detachment with defect
 - 6.7.2.2 Other retinal detachment or defect
 - 6.7.2.3 Other retinal disorders
 - 6.7.3 Glaucoma [88]
 - 6.7.4 Blindness and vision defects [89]
 - 6.7.5 Inflammation; infection of eye (except that caused by TB or STD) [90]
 - 6.7.6 Other eye disorders [91]
- 6.8 Ear conditions
 - 6.8.1 Otitis media and related conditions [92]
 - 6.8.1.1 Suppurative and unspecified otitis media
 - 6.8.1.2 Other otitis media and related conditions
 - 6.8.2 Conditions associated with dizziness or vertigo [93]
 - 6.8.3 Other ear and sense organ disorders [94]
- 6.9 Other nervous system disorders [95]
 - 6.9.1 Disorders of the peripheral nervous system
 - 6.9.2 Other central nervous system disorders
 - 6.9.3 Other nervous system symptoms and disorders
- 7 Diseases of the circulatory system
 - 7.1 Hypertension
 - 7.1.1 Essential hypertension [98]
 - 7.1.2 Hypertension with complications and secondary hypertension [99]
 - 7.1.2.1 Hypertensive heart and/or renal disease
 - 7.1.2.2 Other hypertensive complications
 - 7.2 Diseases of the heart
 - 7.2.1 Heart valve disorders [96]
 - 7.2.1.1 Chronic rheumatic disease of the heart valves
 - 7.2.1.2 Nonrheumatic mitral valve disorders
 - 7.2.1.3 Nonrheumatic aortic valve disorders
 - 7.2.1.4 Other heart valve disorders
 - 7.2.2 Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by TB or STD) [97]
 - 7.2.2.1 Cardiomyopathy
 - 7.2.2.2 Other peri-; endo-; and myocarditis
 - 7.2.3 Acute myocardial infarction [100]
 - 7.2.4 Coronary atherosclerosis and other heart disease [101]
 - 7.2.4.1 Angina pectoris
 - 7.2.4.2 Unstable angina (intermediate coronary syndrome)

- 7.2.4.3 Other acute and subacute forms of ischemic heart disease
- 7.2.4.4 Coronary atherosclerosis
- 7.2.4.5 Other forms of chronic heart disease
- 7.2.5 Nonspecific chest pain [102]
- 7.2.6 Pulmonary heart disease [103]
- 7.2.7 Other and ill-defined heart disease [104]
- 7.2.8 Conduction disorders [105]
 - 7.2.8.1 Atrioventricular block
 - 7.2.8.2 Bundle branch block
 - 7.2.8.3 Anomalous atrioventricular excitation
 - 7.2.8.4 Other conduction disorders
- 7.2.9 Cardiac dysrhythmias [106]
 - 7.2.9.1 Paroxysmal supraventricular tachycardia
 - 7.2.9.2 Paroxysmal ventricular tachycardia
 - 7.2.9.3 Atrial fibrillation
 - 7.2.9.4 Atrial flutter
 - 7.2.9.5 Premature beats
 - 7.2.9.6 Sinoatrial node dysfunction
 - 7.2.9.7 Other cardiac dysrhythmias
- 7.2.10 Cardiac arrest and ventricular fibrillation [107]
- 7.2.11 Congestive heart failure; nonhypertensive [108]
 - 7.2.11.1 Congestive heart failure
 - 7.2.11.2 Heart failure
- 7.3 Cerebrovascular disease
 - 7.3.1 Acute cerebrovascular disease [109]
 - 7.3.1.1 Intracranial hemorrhage
 - 7.3.1.2 Occlusion of cerebral arteries
 - 7.3.1.3 Acute but ill-defined cerebrovascular accident
 - 7.3.2 Occlusion or stenosis of precerebral arteries [110]
 - 7.3.3 Other and ill-defined cerebrovascular disease [111]
 - 7.3.4 Transient cerebral ischemia [112]
 - 7.3.5 Late effects of cerebrovascular disease [113]
- 7.4 Diseases of arteries; arterioles; and capillaries
 - 7.4.1 Peripheral and visceral atherosclerosis [114]
 - 7.4.1.1 Atherosclerosis of arteries of extremities
 - 7.4.1.2 Peripheral vascular disease unspecified
 - 7.4.1.3 Other peripheral and visceral atherosclerosis
 - 7.4.2 Aortic; peripheral; and visceral artery aneurysms [115]
 - 7.4.2.1 Abdominal aortic aneurysm; without rupture
 - 7.4.2.2 Other aneurysm
 - 7.4.3 Aortic and peripheral arterial embolism or thrombosis [116]
 - 7.4.3.1 Arterial embolism and thrombosis of lower extremity artery
 - 7.4.3.2 Other arterial embolism and thrombosis
 - 7.4.4 Other circulatory disease [117]
 - 7.4.4.1 Hypotension
 - 7.4.4.2 Other and unspecified circulatory disease
- 7.5 Diseases of veins and lymphatics
 - 7.5.1 Phlebitis; thrombophlebitis and thromboembolism [118]
 - 7.5.1.1 Phlebitis and thrombophlebitis
 - 7.5.1.2 Other venous embolism and thrombosis

- 7.5.2 Varicose veins of lower extremity [119]
- 7.5.3 Hemorrhoids [120]
- 7.5.4 Other diseases of veins and lymphatics [121]
- 8 Diseases of the respiratory system
 - 8.1 Respiratory infections
 - 8.1.1 Pneumonia (except that caused by TB or STD) [122]
 - 8.1.1.1 Pneumococcal pneumonia
 - 8.1.1.2 Other bacterial pneumonia
 - 8.1.1.3 Pneumonia; organism unspecified
 - 8.1.1.4 Other pneumonia
 - 8.1.2 Influenza [123]
 - 8.1.3 Acute and chronic tonsillitis [124]
 - 8.1.4 Acute bronchitis [125]
 - 8.1.5 Other upper respiratory infections [126]
 - 8.1.5.1 Acute upper respiratory infections of multiple or unspecified sites
 - 8.1.5.2 Chronic sinusitis
 - 8.1.5.3 Croup
 - 8.1.5.4 Other and unspecified upper respiratory infections
 - 8.2 Chronic obstructive pulmonary disease and bronchiectasis [127]
 - 8.2.1 Emphysema
 - 8.2.2 Chronic airway obstruction; not otherwise specified
 - 8.2.3 Obstructive chronic bronchitis
 - 8.2.4 Other chronic pulmonary disease
 - 8.3 Asthma [128]
 - 8.3.1 Chronic obstructive asthma
 - 8.3.1.1 Chronic obstructive asthma without status asthmaticus or exacerbation
 - 8.3.1.2 Chronic obstructive asthma with status asthmaticus
 - 8.3.1.3 Chronic obstructive asthma with acute exacerbation
 - 8.3.2 Other and unspecified asthma
 - 8.3.2.1 Other asthma without status asthmaticus or exacerbation
 - 8.3.2.2 Other asthma with status asthmaticus
 - 8.3.2.3 Other asthma with acute exacerbation
 - 8.4 Aspiration pneumonitis; food/vomitus [129]
 - 8.5 Pleurisy; pneumothorax; pulmonary collapse [130]
 - 8.5.1 Pleurisy; pleural effusion
 - 8.5.2 Pulmonary collapse; interstitial and compensatory emphysema
 - 8.5.3 Empyema and pneumothorax
 - 8.6 Respiratory failure; insufficiency; arrest (adult) [131]
 - 8.6.1 Respiratory failure
 - 8.6.2 Other respiratory insufficiency
 - 8.7 Lung disease due to external agents [132]
 - 8.8 Other lower respiratory disease [133]
 - 8.8.1 Postinflammatory pulmonary fibrosis
 - 8.8.2 Painful respiration
 - 8.8.3 Other and unspecified lower respiratory disease
 - 8.9 Other upper respiratory disease [134]
- 9 Diseases of the digestive system
 - 9.1 Intestinal infection [135]
 - 9.2 Disorders of teeth and jaw [136]
 - 9.3 Diseases of mouth; excluding dental [137]

- 9.4 Upper gastrointestinal disorders
 - 9.4.1 Esophageal disorders [138]
 - 9.4.1.1 Esophagitis
 - 9.4.1.2 Other esophageal disorders
 - 9.4.2 Gastroduodenal ulcer (except hemorrhage) [139]
 - 9.4.2.1 Gastric ulcer
 - 9.4.2.2 Duodenal ulcer
 - 9.4.2.3 Peptic ulcer; site unspecified
 - 9.4.2.4 Gastrojejunal ulcer
 - 9.4.3 Gastritis and duodenitis [140]
 - 9.4.3.1 Acute gastritis
 - 9.4.3.2 Other specified gastritis
 - 9.4.3.3 Unspecified gastritis and gastroduodenitis
 - 9.4.3.4 Duodenitis
 - 9.4.4 Other disorders of stomach and duodenum [141]
- 9.5 Abdominal hernia [143]
 - 9.5.1 Inguinal hernia
 - 9.5.1.1 Inguinal hernia with obstruction or gangrene
 - 9.5.1.2 Inguinal hernia without obstruction or gangrene
 - 9.5.2 Diaphragmatic hernia
 - 9.5.3 Other abdominal hernia
 - 9.5.3.1 Femoral hernia with obstruction/gangrene
 - 9.5.3.2 Femoral hernia without obstruction/gangrene
 - 9.5.3.3 Umbilical hernia with obstruction/gangrene
 - 9.5.3.4 Umbilical hernia without obstruction/gangrene
 - 9.5.3.5 Ventral hernia with obstruction/gangrene
 - 9.5.3.6 Ventral hernia without obstruction/gangrene
 - 9.5.3.7 Incisional hernia with obstruction/gangrene
 - 9.5.3.8 Incisional hernia without obstruction/gangrene
 - 9.5.3.9 Other and unspecified hernia
- 9.6 Lower gastrointestinal disorders
 - 9.6.1 Appendicitis and other appendiceal conditions [142]
 - 9.6.1.1 Acute appendicitis with abscess or peritonitis
 - 9.6.1.2 Acute appendicitis without abscess or peritonitis
 - 9.6.1.3 Acute appendicitis; not otherwise specified
 - 9.6.1.4 Other appendiceal conditions
 - 9.6.2 Regional enteritis and ulcerative colitis [144]
 - 9.6.3 Intestinal obstruction without hernia [145]
 - 9.6.3.1 Paralytic ileus
 - 9.6.3.2 Impaction of intestine
 - 9.6.3.3 Peritoneal or intestinal adhesions
 - 9.6.3.4 Other intestinal obstruction
 - 9.6.4 Diverticulosis and diverticulitis [146]
 - 9.6.4.1 Diverticulosis
 - 9.6.4.2 Diverticulitis
 - 9.6.5 Anal and rectal conditions [147]
 - 9.6.6 Peritonitis and intestinal abscess [148]
- 9.7 Biliary tract disease [149]
 - 9.7.1 Cholelithiasis with acute cholecystitis
 - 9.7.2 Cholelithiasis with other cholecystitis

- 9.7.3 Cholelithiasis without mention of cholecystitis
- 9.7.4 Calculus of bile duct
- 9.7.5 Cholecystitis without cholelithiasis
- 9.7.6 Other biliary tract disease
- 9.8 Liver disease
 - 9.8.1 Liver disease; alcohol-related [150]
 - 9.8.2 Other liver diseases [151]
 - 9.8.2.1 Cirrhosis of liver without mention of alcohol
 - 9.8.2.2 Liver abscess and sequelae of chronic liver disease
 - 9.8.2.3 Ascites
 - 9.8.2.4 Other and unspecified liver disorders
- 9.9 Pancreatic disorders (not diabetes) [152]
 - 9.9.1 Acute pancreatitis
 - 9.9.2 Chronic pancreatitis
 - 9.9.3 Other pancreatic disorders
- 9.1 Gastrointestinal hemorrhage [153]
 - 9.10.1 Hemorrhage from gastrointestinal ulcer
 - 9.10.2 Melena
 - 9.10.3 Gastroesophageal laceration syndrome
 - 9.10.4 Other esophageal bleeding
 - 9.10.5 Hemorrhage of rectum and anus
 - 9.10.6 Hematemesis
 - 9.10.7 Hemorrhage of gastrointestinal tract
- 9.11 Noninfectious gastroenteritis [154]
- 9.12 Other gastrointestinal disorders [155]
 - 9.12.1 Constipation
 - 9.12.2 Dysphagia
 - 9.12.3 Other and unspecified gastrointestinal disorders
- 10 Diseases of the genitourinary system
 - 10.1 Diseases of the urinary system
 - 10.1.1 Nephritis; nephrosis; renal sclerosis [156]
 - 10.1.2 Acute and unspecified renal failure [157]
 - 10.1.2.1 Acute renal failure
 - 10.1.2.2 Unspecified renal failure
 - 10.1.3 Chronic renal failure [158]
 - 10.1.4 Urinary tract infections [159]
 - 10.1.4.1 Infections of kidney
 - 10.1.4.2 Cystitis and urethritis
 - 10.1.4.3 Urinary tract infection; site not specified
 - 10.1.5 Calculus of urinary tract [160]
 - 10.1.5.1 Calculus of kidney
 - 10.1.5.2 Calculus of ureter
 - 10.1.5.3 Other and unspecified urinary calculus
 - 10.1.6 Other diseases of kidney and ureters [161]
 - 10.1.6.1 Hydronephrosis
 - 10.1.6.2 Other and unspecified diseases of kidney and ureters
 - 10.1.7 Other diseases of bladder and urethra [162]
 - 10.1.7.1 Bladder neck obstruction
 - 10.1.7.2 Other and unspecified diseases of bladder and urethra
 - 10.1.8 Genitourinary symptoms and ill-defined conditions [163]

- 10.1.8.1 Hematuria
- 10.1.8.2 Retention of urine
- 10.1.8.3 Other and unspecified genitourinary symptoms
- 10.2 Diseases of male genital organs
 - 10.2.1 Hyperplasia of prostate [164]
 - 10.2.2 Inflammatory conditions of male genital organs [165]
 - 10.2.3 Other male genital disorders [166]
- 10.3 Diseases of female genital organs
 - 10.3.1 Nonmalignant breast conditions [167]
 - 10.3.2 Inflammatory diseases of female pelvic organs [168]
 - 10.3.2.1 Pelvic peritoneal adhesions
 - 10.3.2.2 Cervicitis and endocervicitis
 - 10.3.2.3 Pelvic inflammatory disease (PID)
 - 10.3.2.4 Other inflammatory diseases of female pelvic organs
 - 10.3.3 Endometriosis [169]
 - 10.3.4 Prolapse of female genital organs [170]
 - 10.3.5 Menstrual disorders [171]
 - 10.3.6 Ovarian cyst [172]
 - 10.3.7 Menopausal disorders [173]
 - 10.3.8 Female infertility [174]
 - 10.3.9 Other female genital disorders [175]
 - 10.3.9.1 Female genital pain and other symptoms
 - 10.3.9.2 Other and unspecified female genital disorders
- 11 Complications of pregnancy; childbirth; and the puerperium
 - 11.1 Contraceptive and procreative management [176]
 - 11.1.1 Sterilization
 - 11.1.2 Other contraceptive and procreation management
 - 11.2 Abortion-related disorders
 - 11.2.1 Spontaneous abortion [177]
 - 11.2.2 Induced abortion [178]
 - 11.2.3 Postabortion complications [179]
 - 11.3 Complications mainly related to pregnancy
 - 11.3.1 Ectopic pregnancy [180]
 - 11.3.2 Hemorrhage during pregnancy; abruptio placenta; placenta previa [182]
 - 11.3.2.1 Placenta previa
 - 11.3.2.2 Abruptio placenta
 - 11.3.2.3 Other hemorrhage during pregnancy; childbirth and the puerperium
 - 11.3.3 Hypertension complicating pregnancy; childbirth and the puerperium [183]
 - 11.3.3.1 Preeclampsia and eclampsia
 - 11.3.3.2 Other hypertension in pregnancy
 - 11.3.4 Early or threatened labor [184]
 - 11.3.4.1 Threatened premature labor
 - 11.3.4.2 Early onset of delivery
 - 11.3.4.3 Other early or threatened labor
 - 11.3.5 Prolonged pregnancy [185]
 - 11.3.6 Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium [186]
 - 11.3.7 Other complications of pregnancy [181]
 - 11.3.7.1 Infections of genitourinary tract during pregnancy
 - 11.3.7.2 Anemia during pregnancy

- 11.3.7.3 Mental disorders during pregnancy
- 11.3.7.4 Missed abortion
- 11.3.7.5 Hyperemesis gravidarum
- 11.3.7.6 Infectious and parasitic complications in mother affecting pregnancy
- 11.3.7.7 Other and unspecified complications of pregnancy
- 11.4 Indications for care in pregnancy; labor; and delivery
- 11.4.1 Malposition; malpresentation [187]
- 11.4.1.1 Breech presentation
- 11.4.1.2 Other malposition; malpresentation
- 11.4.2 Fetopelvic disproportion; obstruction [188]
- 11.4.2.1 Fetopelvic disproportion
- 11.4.2.2 Other disproportion or obstruction
- 11.4.3 Previous cesarean section [189]
- 11.4.4 Fetal distress and abnormal forces of labor [190]
- 11.4.4.1 Fetal distress
- 11.4.4.2 Uterine inertia
- 11.4.4.3 Precipitate labor
- 11.4.4.4 Other abnormal forces of labor
- 11.4.5 Polyhydramnios and other problems of amniotic cavity [191]
- 11.4.5.1 Premature rupture of membranes
- 11.4.5.2 Infection of amniotic cavity
- 11.4.5.3 Other problems of amniotic cavity
- 11.5 Complications during labor
- 11.5.1 Umbilical cord complication [192]
- 11.5.1.1 Cord around neck with compression
- 11.5.1.2 Other and unspecified cord entanglement with or without compression
- 11.5.1.3 Other umbilical cord complications
- 11.5.2 Trauma to perineum and vulva [193]
- 11.5.2.1 First degree perineal laceration
- 11.5.2.2 Second degree perineal laceration
- 11.5.2.3 Third degree perineal laceration
- 11.5.2.4 Fourth degree perineal laceration
- 11.5.2.5 Other perineal laceration and trauma
- 11.5.3 Forceps delivery [194]
- 11.6 Other complications of birth; puerperium affecting management of mother [195]
- 11.6.1 Postpartum hemorrhage
- 11.6.2 Complications of the puerperium
- 11.6.3 Cervical incompetence
- 11.6.4 Rhesus isoimmunization
- 11.6.5 Intrauterine death
- 11.6.6 Failed induction
- 11.6.7 Other obstetrical trauma
- 11.6.8 Other and unspecified complications of birth; puerperium affecting management of mother
- 11.7 Normal pregnancy and/or delivery [196]
- 11.7.1 Normal delivery
- 11.7.2 Multiple gestation
- 11.7.3 Outcome of delivery (V codes)
- 12 Diseases of the skin and subcutaneous tissue

- 12.1 Skin and subcutaneous tissue infections [197]
 - 12.1.1 Cellulitis and abscess
 - 12.1.1.1 Cellulitis and abscess of fingers and toes
 - 12.1.1.2 Cellulitis and abscess of face
 - 12.1.1.3 Cellulitis and abscess of arm
 - 12.1.1.4 Cellulitis and abscess of hand
 - 12.1.1.5 Cellulitis and abscess of leg
 - 12.1.1.6 Cellulitis and abscess of foot
 - 12.1.1.7 Other cellulitis and abscess
 - 12.1.2 Other skin and subcutaneous infections
- 12.2 Other inflammatory condition of skin [198]
- 12.3 Chronic ulcer of skin [199]
 - 12.3.1 Decubitus ulcer
 - 12.3.2 Chronic ulcer of leg or foot
 - 12.3.3 Other chronic skin ulcer
- 12.4 Other skin disorders [200]
- 13 Diseases of the musculoskeletal system and connective tissue
 - 13.1 Infective arthritis and osteomyelitis (except that caused by TB or STD) [201]
 - 13.2 Non-traumatic joint disorders
 - 13.2.1 Rheumatoid arthritis and related disease [202]
 - 13.2.2 Osteoarthritis [203]
 - 13.2.2.1 Osteoarthritis; localized
 - 13.2.2.2 Osteoarthritis; generalized and unspecified
 - 13.2.3 Other non-traumatic joint disorders [204]
 - 13.3 Spondylosis; intervertebral disc disorders; other back problems [205]
 - 13.3.1 Spondylosis and allied disorders
 - 13.3.2 Intervertebral disc disorders
 - 13.3.3 Other back problems
 - 13.3.3.1 Cervical radiculitis
 - 13.3.3.2 Spinal stenosis; lumbar region
 - 13.3.3.3 Lumbago
 - 13.3.3.4 Sciatica
 - 13.3.3.5 Thoracic or lumbosacral neuritis or radiculitis; unspecified
 - 13.3.3.6 Backache; unspecified
 - 13.3.3.7 Other back pain and disorders
 - 13.4 Osteoporosis [206]
 - 13.5 Pathological fracture [207]
 - 13.6 Acquired deformities
 - 13.6.1 Acquired foot deformities [208]
 - 13.6.2 Other acquired deformities [209]
 - 13.7 Systemic lupus erythematosus and connective tissue disorders [210]
 - 13.8 Other connective tissue disease [211]
 - 13.9 Other bone disease and musculoskeletal deformities [212]
 - 14 Congenital anomalies
 - 14.1 Cardiac and circulatory congenital anomalies [213]
 - 14.1.1 Transposition of great vessels
 - 14.1.2 Tetralogy of Fallot
 - 14.1.3 Ventricular septal defect
 - 14.1.4 Atrial septal defect
 - 14.1.5 Endocardial cushion defects

- 14.1.6 Pulmonary valve atresia and stenosis
- 14.1.7 Aortic valve stenosis
- 14.1.8 Patent ductus arteriosus
- 14.1.9 Coarctation of aorta
- 14.1.10 Pulmonary artery anomalies
- 14.1.11 Cerebrovascular anomalies
- 14.1.12 Other cardiac and circulatory congenital anomalies
- 14.2 Digestive congenital anomalies [214]
- 14.2.1 Esophageal atresia/tracheoesophageal fistula
- 14.2.2 Pyloric stenosis
- 14.2.3 Rectal and large intestine atresia/stenosis
- 14.2.4 Hirschsprung's disease
- 14.2.5 Other digestive congenital anomalies
- 14.3 Genitourinary congenital anomalies [215]
- 14.3.1 Undescended testicle
- 14.3.2 Hypospadias and epispadias
- 14.3.3 Obstructive genitourinary defect
- 14.3.4 Other genitourinary congenital anomalies
- 14.4 Nervous system congenital anomalies [216]
- 14.4.1 Spina bifida
- 14.4.2 Congenital hydrocephalus
- 14.4.3 Other nervous system congenital anomalies
- 14.5 Other congenital anomalies [217]
- 14.5.1 Cleft palate without cleft lip
- 14.5.2 Cleft lip with or without cleft palate
- 14.5.3 Congenital hip dislocation
- 14.5.4 All other congenital anomalies
- 15 Certain conditions originating in the perinatal period
- 15.1 Liveborn [218]
- 15.2 Short gestation; low birth weight; and fetal growth retardation [219]
- 15.3 Intrauterine hypoxia and birth asphyxia [220]
- 15.4 Respiratory distress syndrome [221]
- 15.5 Hemolytic jaundice and perinatal jaundice [222]
- 15.6 Birth trauma [223]
- 15.7 Other perinatal conditions [224]
- 15.7.1 Respiratory conditions of fetus and newborn; other than respiratory distress
- 15.7.2 Infections specific to the perinatal period
- 15.7.3 Endocrine and metabolic disturbances of fetus and newborn
- 15.7.4 Other and unspecified perinatal conditions
- 16 Injury and poisoning
- 16.1 Joint disorders and dislocations; trauma-related [225]
- 16.2 Fractures
- 16.2.1 Fracture of neck of femur (hip) [226]
- 16.2.2 Skull and face fractures [228]
- 16.2.3 Fracture of upper limb [229]
- 16.2.3.1 Fracture of humerus
- 16.2.3.2 Fracture of radius and ulna
- 16.2.3.3 Other fracture of upper limb
- 16.2.4 Fracture of lower limb [230]
- 16.2.4.1 Fracture of tibia and fibula

- 16.2.4.2 Fracture of ankle
- 16.2.4.3 Other fracture of lower limb
- 16.2.5 Other fractures [231]
- 16.2.5.1 Fracture of vertebral column without mention of spinal cord injury
- 16.2.5.2 Fracture of ribs; closed
- 16.2.5.3 Fracture of pelvis
- 16.2.5.4 Other and unspecified fracture
- 16.3 Spinal cord injury [227]
- 16.4 Intracranial injury [233]
- 16.4.1 Concussion
- 16.4.2 Other intracranial injury
- 16.5 Crushing injury or internal injury [234]
- 16.6 Open wounds
- 16.6.1 Open wounds of head; neck; and trunk [235]
- 16.6.2 Open wounds of extremities [236]
- 16.7 Sprains and strains [232]
- 16.8 Superficial injury; contusion [239]
- 16.9 Burns [240]
- 16.1 Complications
- 16.10.1 Complication of device; implant or graft [237]
- 16.10.1.1 Malfunction of device; implant; and graft
- 16.10.1.2 Infection and inflammation--internal prosthetic device; implant; and graft
- 16.10.1.3 Other complications of internal prosthetic device; implant; and graft
- 16.10.1.4 Complications of transplants and reattached limbs
- 16.10.2 Complications of surgical procedures or medical care [238]
- 16.10.2.1 Cardiac complications
- 16.10.2.2 Respiratory complications
- 16.10.2.3 Gastrointestinal complications
- 16.10.2.4 Urinary complications
- 16.10.2.5 Hemorrhage or hematoma complicating a procedure
- 16.10.2.6 Postoperative infection
- 16.10.2.7 Other complications of surgical and medical procedures
- 16.11 Poisoning
- 16.11.1 Poisoning by psychotropic agents [241]
- 16.11.2 Poisoning by other medications and drugs [242]
- 16.11.3 Poisoning by nonmedicinal substances [243]
- 16.12 Other injuries and conditions due to external causes [244]
- 17 Symptoms; signs; and ill-defined conditions and factors influencing health status
- 17.1 Symptoms; signs; and ill-defined conditions
- 17.1.1 Syncope [245]
- 17.1.2 Fever of unknown origin [246]
- 17.1.3 Lymphadenitis [247]
- 17.1.4 Gangrene [248]
- 17.1.5 Shock [249]
- 17.1.6 Nausea and vomiting [250]
- 17.1.7 Abdominal pain [251]
- 17.1.8 Malaise and fatigue [252]
- 17.1.9 Allergic reactions [253]
- 17.2 Factors influencing health care

- 17.2.1 Rehabilitation care; fitting of prostheses; and adjustment of devices [254]
- 17.2.2 Administrative/social admission [255]
- 17.2.3 Medical examination/evaluation [256]
- 17.2.4 Other aftercare [257]
- 17.2.5 Other screening for suspected conditions (not mental disorders or infectious disease) [258]
- 18 Residual codes; unclassified; all E codes [259 and 260]

Appendix 4

Multi-Level CCS – Procedures

MULTI-LEVEL

CATEGORY LABELS [Single-Level CCS Procedure Category]

- 1 Operations on the nervous system
 - 1.1 Incision and excision of CNS [1]
 - 1.1.1 Craniotomy and craniectomy
 - 1.1.2 Incision of cerebral meninges
 - 1.1.3 Other incision and excision of CNS
 - 1.2 Insertion; replacement; or removal of extracranial ventricular shunt [2]
 - 1.3 Laminectomy; excision intervertebral disc [3]
 - 1.3.1 Excision of intervertebral disc
 - 1.3.2 Laminectomy
 - 1.4 Diagnostic spinal tap [4]
 - 1.5 Insertion of catheter or spinal stimulator and injection into spinal canal [5]
 - 1.6 Decompression peripheral nerve [6]
 - 1.6.1 Release of carpal tunnel
 - 1.6.2 Other lysis of adhesion and decompression of peripheral nerves
 - 1.7 Other diagnostic nervous system procedures [7]
 - 1.8 Other non-OR or closed therapeutic nervous system procedures [8]
 - 1.9 Other OR therapeutic nervous system procedures [9]
- 2 Operations on the endocrine system
 - 2.1 Thyroidectomy; partial or complete [10]
 - 2.2 Diagnostic endocrine procedures [11]
 - 2.3 Other therapeutic endocrine procedures [12]
- 3 Operations on the eye
 - 3.1 Corneal transplant [13]
 - 3.2 Glaucoma procedures [14]
 - 3.3 Lens and cataract procedures [15]
 - 3.3.1 Insertion of prosthetic lens
 - 3.3.2 Phacoemulsification and aspiration of cataract
 - 3.3.3 Other extracapsular extraction of lens
 - 3.3.4 Other lens and cataract procedures
 - 3.4 Repair of retinal tear; detachment [16]
 - 3.5 Destruction of lesion of retina and choroid [17]
 - 3.6 Diagnostic procedures on eye [18]
 - 3.7 Other therapeutic procedures on eyelids; conjunctiva; cornea [19]
 - 3.8 Other intraocular therapeutic procedures [20]
 - 3.9 Other extraocular muscle and orbit therapeutic procedures [21]
- 4 Operations on the ear
 - 4.1 Tympanoplasty [22]
 - 4.2 Myringotomy [23]
 - 4.3 Mastoidectomy [24]
 - 4.4 Diagnostic procedures on ear [25]
 - 4.5 Other therapeutic ear procedures [26]
- 5 Operations on the nose; mouth; and pharynx

- 5.1 Control of epistaxis [27]
- 5.2 Plastic procedures on nose [28]
- 5.3 Dental procedures [29]
- 5.4 Tonsillectomy and/or adenoidectomy [30]
 - 5.4.1 Tonsillectomy without adenoidectomy
 - 5.4.2 Tonsillectomy with adenoidectomy
 - 5.4.3 Adenoidectomy without tonsillectomy
 - 5.4.4 Control of hemorrhage after tonsillectomy or adenoidectomy
- 5.5 Diagnostic procedures on nose; mouth and pharynx [31]
 - 5.5.1 Diagnostic procedures on nasal sinuses
 - 5.5.2 Other diagnostic procedures on nose; mouth and pharynx
- 5.6 Other non-OR therapeutic procedures on nose; mouth and pharynx [32]
 - 5.6.1 Non-OR procedures on nasal sinuses
 - 5.6.2 Other non-OR procedures on nasal sinuses
- 5.7 Other OR therapeutic procedures on nose; mouth and pharynx [33]
 - 5.7.1 OR procedures on nasal sinuses
 - 5.7.2 Excision salivary gland
 - 5.7.3 Repair cleft lip
 - 5.7.4 Correction cleft palate
 - 5.7.5 Incision and drainage of tonsils
 - 5.7.6 Other procedures on nose; mouth and pharynx
- 6 Operations on the respiratory system
 - 6.1 Tracheostomy; temporary and permanent [34]
 - 6.2 Tracheoscopy and laryngoscopy with biopsy [35]
 - 6.3 Lobectomy or pneumonectomy [36]
 - 6.4 Diagnostic bronchoscopy and biopsy of bronchus [37]
 - 6.4.1 Bronchoscopy without biopsy
 - 6.4.2 Endoscopic biopsy of bronchus
 - 6.4.3 Needle biopsy of lung
 - 6.4.4 Endoscopic biopsy of lung
 - 6.5 Other diagnostic procedures on lung and bronchus [38]
 - 6.6 Incision of pleura; thoracentesis; chest drainage [39]
 - 6.6.1 Closed chest drainage
 - 6.6.2 Open chest drainage
 - 6.6.3 Thoracentesis
 - 6.7 Other diagnostic procedures of respiratory tract and mediastinum [40]
 - 6.8 Other non-OR therapeutic procedures on respiratory system [41]
 - 6.9 Other OR therapeutic procedures on respiratory system [42]
- 7 Operations on the cardiovascular system
 - 7.1 Heart valve procedures [43]
 - 7.2 Coronary artery bypass graft (CABG) [44]
 - 7.2.1 Bypass of one coronary artery
 - 7.2.2 Bypass of two coronary arteries
 - 7.2.3 Bypass of three coronary arteries
 - 7.2.4 Bypass of four coronary arteries
 - 7.2.5 Other bypass of coronary arteries
 - 7.3 Percutaneous transluminal coronary angioplasty (PTCA) [45]
 - 7.3.1 Single vessel PTCA
 - 7.3.2 Multiple vessel PTCA
 - 7.4 Coronary thrombolysis [46]

- 7.5 Diagnostic cardiac catheterization; coronary arteriography [47]
- 7.5.1 Coronary arteriography
- 7.5.2 Cardiac catheterization
- 7.6 Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator [48]
- 7.6.1 Insertion; revision; replacement; or removal of pacemaker leads
- 7.6.2 Insertion; revision; replacement; or removal of pacemaker device
- 7.6.3 Insertion; revision; replacement; or removal of cardioverter/defibrillator
- 7.7 Other OR heart procedures [49]
- 7.8 Extracorporeal circulation auxiliary to open heart procedures [50]
- 7.9 Endarterectomy; vessel of head and neck [51]
- 7.1 Aortic resection; replacement or anastomosis [52]
- 7.11 Varicose vein stripping; lower limb [53]
- 7.12 Other vascular catheterization; not heart [54]
- 7.12.1 Arterial catheterization
- 7.12.2 Umbilical vein catheterization
- 7.12.3 Venous catheterization
- 7.13 Peripheral vascular bypass [55]
- 7.14 Other vascular bypass and shunt; not heart [56]
- 7.15 Creation; revision and removal of arteriovenous fistula or vessel-to-vessel cannula for dialysis [57]
- 7.16 Hemodialysis [58]
- 7.17 Other OR procedures on vessels of head and neck [59]
- 7.18 Embolectomy and endarterectomy of lower limbs [60]
- 7.19 Other OR procedures on vessels other than head and neck [61]
- 7.19.1 Interrupt vena cava
- 7.19.2 Other OR procedures on blood vessels
- 7.2 Other diagnostic cardiovascular procedures [62]
- 7.21 Other non-OR therapeutic cardiovascular procedures [63]
- 8 Operations on the hemic and lymphatic system
- 8.1 Bone marrow transplant [64]
- 8.2 Bone marrow biopsy [65]
- 8.3 Procedures on spleen [66]
- 8.4 Other therapeutic procedures; hemic and lymphatic system [67]
- 8.4.1 Biopsy of lymphatic structure
- 8.4.2 Simple excision of lymphatic structure
- 8.4.3 Regional lymph node excision
- 8.4.4 Radical excision lymph nodes
- 8.4.5 Other hemic and lymphatic procedures
- 9 Operations on the digestive system
- 9.1 Therapeutic procedures on the esophagus
- 9.1.1 Injection or ligation of esophageal varices [68]
- 9.1.2 Esophageal dilatation [69]
- 9.2 Upper gastrointestinal endoscopy; biopsy [70]
- 9.2.1 Esophagoscopy
- 9.2.2 Gastroscopy
- 9.2.3 Esophagogastroduodenoscopy (EGD) without biopsy
- 9.2.4 Esophagogastroduodenoscopy (EGD) with biopsy
- 9.2.5 Endoscopic biopsy small intestine
- 9.3 Gastrostomy; temporary and permanent [71]

- 9.4 Colostomy; temporary and permanent [72]
- 9.5 Ileostomy and other enterostomy [73]
- 9.6 Gastrectomy; partial and total [74]
- 9.7 Small bowel resection [75]
- 9.8 Colonoscopy and biopsy [76]
 - 9.8.1 Closed endoscopic biopsy of large intestine
 - 9.8.2 Other endoscopy of large intestine
- 9.9 Proctoscopy and anorectal biopsy [77]
- 9.1 Colorectal resection [78]
 - 9.10.1 Right hemicolectomy
 - 9.10.2 Left hemicolectomy
 - 9.10.3 Sigmoidectomy
 - 9.10.4 Resection of rectum
 - 9.10.5 Other colorectal resections
- 9.11 Local excision of large intestine lesion (not endoscopic) [79]
- 9.12 Appendectomy [80]
- 9.13 Hemorrhoid procedures [81]
- 9.14 Endoscopic retrograde cannulation of pancreas (ERCP) [82]
- 9.15 Biopsy of liver [83]
- 9.16 Cholecystectomy and common duct exploration [84]
 - 9.16.1 Open cholecystectomy
 - 9.16.2 Laparoscopic cholecystectomy
 - 9.16.3 Incision of bile duct
- 9.17 Inguinal and femoral hernia repair [85]
 - 9.17.1 Unilateral repair inguinal hernia
 - 9.17.2 Bilateral repair inguinal hernia
 - 9.17.3 Femoral hernia repair
- 9.18 Other hernia repair [86]
 - 9.18.1 Umbilical hernia repair
 - 9.18.2 Incisional hernia repair
 - 9.18.3 Other abdominal wall hernia repair
 - 9.18.4 Other hernia repair
- 9.19 Laparoscopy [87]
- 9.2 Abdominal paracentesis [88]
- 9.21 Exploratory laparotomy [89]
- 9.22 Excision; lysis peritoneal adhesions [90]
- 9.23 Peritoneal dialysis [91]
- 9.24 Other bowel diagnostic procedures [92]
- 9.25 Other non-OR upper GI therapeutic procedures [93]
- 9.26 Other OR upper GI therapeutic procedures [94]
- 9.27 Other non-OR lower GI therapeutic procedures [95]
- 9.28 Other OR lower GI therapeutic procedures [96]
 - 9.28.1 Closure of stoma of large intestine
 - 9.28.2 Local excision of rectal lesion
 - 9.28.3 Incision of perirectal tissue
 - 9.28.4 Incision of perianal abscess
 - 9.28.5 Incision/excision of anal fistula
 - 9.28.6 Other lower GI procedures
- 9.29 Other gastrointestinal diagnostic procedures [97]
- 9.3 Other non-OR gastrointestinal therapeutic procedures [98]

- 9.31 Other OR gastrointestinal therapeutic procedures [99]
 - 9.31.1 Radical pancreaticoduodenectomy
 - 9.31.2 Incision abdominal wall
 - 9.31.3 Excision or destruction of peritoneal tissue
 - 9.31.4 Creation of cutaneoperitoneal fistula
 - 9.31.5 Other gastrointestinal therapeutic procedures
- 10 Operations on the urinary system
 - 10.1 Cystoscopy and other transurethral procedures
 - 10.1.1 Endoscopy and endoscopic biopsy of the urinary tract [100]
 - 10.1.2 Transurethral excision; drainage; or removal of urinary obstruction [101]
 - 10.1.3 Ureteral catheterization [102]
 - 10.2 Nephrotomy and nephrostomy [103]
 - 10.3 Nephrectomy; partial or complete [104]
 - 10.4 Kidney transplant [105]
 - 10.5 Genitourinary incontinence procedures [106]
 - 10.6 Extracorporeal lithotripsy; urinary [107]
 - 10.7 Indwelling catheter [108]
 - 10.8 Procedures on the urethra [109]
 - 10.9 Other diagnostic procedures of urinary tract [110]
 - 10.1 Other non-OR therapeutic procedures of urinary tract [111]
 - 10.11 Other OR therapeutic procedures of urinary tract [112]
- 11 Operations on the male genital organs
 - 11.1 Transurethral resection of prostate (TURP) [113]
 - 11.2 Open prostatectomy [114]
 - 11.3 Circumcision [115]
 - 11.4 Diagnostic procedures; male genital [116]
 - 11.5 Other non-OR therapeutic procedures; male genital [117]
 - 11.6 Other OR therapeutic procedures; male genital [118]
 - 11.6.1 Unilateral orchiectomy
 - 11.6.2 Bilateral orchiectomy
 - 11.6.3 Orchiopexy
 - 11.6.4 Insert or replace penile prosthesis
 - 11.6.5 Other male genital procedures
- 12 Operations on the female genital organs
 - 12.1 Oophorectomy; unilateral and bilateral [119]
 - 12.2 Other operations on ovary [120]
 - 12.3 Ligation of fallopian tubes [121]
 - 12.4 Other operations on fallopian tubes [123]
 - 12.5 Hysterectomy; abdominal and vaginal [124]
 - 12.5.1 Total abdominal hysterectomy
 - 12.5.2 Vaginal hysterectomy
 - 12.5.3 Other hysterectomy
 - 12.6 Other excision of cervix and uterus [125]
 - 12.7 Abortion (termination of pregnancy) [126]
 - 12.8 Dilatation and curettage (D&C); aspiration after delivery or abortion [127]
 - 12.9 Diagnostic dilatation and curettage (D&C) [128]
 - 12.1 Repair of cystocele and rectocele; obliteration of vaginal vault [129]
 - 12.11 Other diagnostic procedures; female organs [130]
 - 12.12 Other non-OR therapeutic procedures; female organs [131]
 - 12.13 Other OR therapeutic procedures; female organs [132]

- 13 Obstetrical procedures
 - 13.1 Episiotomy [133]
 - 13.2 Cesarean section [134]
 - 13.3 Forceps; vacuum; and breech delivery [135]
 - 13.3.1 Low forceps delivery with episiotomy
 - 13.3.2 Vacuum extraction with episiotomy
 - 13.3.3 Other vacuum extraction
 - 13.3.4 Other forceps or breech delivery
 - 13.4 Artificial rupture of membranes to assist delivery [136]
 - 13.5 Other procedures to assist delivery [137]
 - 13.5.1 Induction of labor by artificial rupture of membranes
 - 13.5.2 Medical induction of labor
 - 13.5.3 Other manually assisted labor
 - 13.5.4 Other delivery procedures
 - 13.6 Diagnostic amniocentesis [138]
 - 13.7 Fetal monitoring [139]
 - 13.8 Repair of current obstetric laceration [140]
 - 13.8.1 Repair of obstetric laceration of uterus or cervix
 - 13.8.2 Repair of obstetric laceration of bladder or urethra
 - 13.8.3 Repair of obstetric laceration of rectum or sphincter
 - 13.8.4 Repair of other obstetric laceration
 - 13.9 Other therapeutic obstetrical procedures [141]
- 13.1 Removal of ectopic pregnancy [122]
- 14 Operations on the musculoskeletal system
 - 14.1 Partial excision bone [142]
 - 14.2 Bunionectomy or repair of toe deformities [143]
 - 14.3 Treatment of fracture or dislocation
 - 14.3.1 Treatment; facial fracture or dislocation [144]
 - 14.3.2 Treatment; fracture or dislocation of radius and ulna [145]
 - 14.3.3 Treatment; fracture or dislocation of hip and femur [146]
 - 14.3.4 Treatment; fracture or dislocation of lower extremity (other than hip or femur) [147]
 - 14.3.5 Other fracture and dislocation procedure [148]
 - 14.4 Arthroscopy [149]
 - 14.4.1 Arthroscopy of knee
 - 14.4.2 Other arthroscopy
 - 14.5 Division of joint capsule; ligament or cartilage [150]
 - 14.6 Excision of semilunar cartilage of knee [151]
 - 14.7 Arthroplasty
 - 14.7.1 Arthroplasty knee [152]
 - 14.7.2 Hip replacement; total and partial [153]
 - 14.7.3 Arthroplasty other than hip or knee [154]
 - 14.8 Arthrocentesis [155]
 - 14.9 Injections and aspirations of muscles; tendons; bursa; joints and soft tissue [156]
 - 14.1 Amputation of lower extremity [157]
 - 14.10.1 Amputation of toe
 - 14.10.2 Amputation through foot
 - 14.10.3 Below knee amputation
 - 14.10.4 Above knee amputation

- 14.10.5 Other lower extremity amputation
- 14.11 Spinal fusion [158]
- 14.12 Other diagnostic procedures on musculoskeletal system [159]
- 14.13 Other therapeutic procedures on muscles and tendons [160]
- 14.13.1 Rotator cuff repair
- 14.13.2 Other suture of muscle; tendon and fascia
- 14.13.3 Other muscle and tendon procedures
- 14.14 Other OR therapeutic procedures on bone [161]
- 14.15 Other OR therapeutic procedures on joints [162]
- 14.16 Other non-OR therapeutic procedures on musculoskeletal system [163]
- 14.17 Other OR therapeutic procedures on musculoskeletal system [164]
- 15 Operations on the integumentary system
- 15.1 Procedures on the breast
- 15.1.1 Breast biopsy and other diagnostic procedures on breast [165]
- 15.1.2 Lumpectomy; quadrantectomy of breast [166]
- 15.1.3 Mastectomy [167]
- 15.2 Incision and drainage; skin and subcutaneous tissue [168]
- 15.3 Debridement of wound; infection or burn [169]
- 15.4 Excision of skin lesion [170]
- 15.5 Suture of skin and subcutaneous tissue [171]
- 15.6 Skin graft [172]
- 15.7 Other diagnostic procedures on skin and subcutaneous tissue [173]
- 15.8 Other non-OR therapeutic procedures on skin and breast [174]
- 15.8.1 Aspiration of skin and subcutaneous tissue
- 15.8.2 Insertion of totally implantable vascular access device
- 15.8.3 Debridement of nail
- 15.8.4 Other skin and breast procedures; non-OR
- 15.9 Other OR therapeutic procedures on skin and breast [175]
- 15.9.1 Bilateral reduction mammoplasty
- 15.9.2 Excision pilonidal cyst or sinus
- 15.9.3 Other skin and breast procedures; OR
- 16 Miscellaneous diagnostic and therapeutic procedures
- 16.1 Other organ transplantation [176]
- 16.2 Computerized axial tomography (CT) scan
- 16.2.1 Computerized axial tomography (CT) scan head [177]
- 16.2.2 CT scan chest [178]
- 16.2.3 CT scan abdomen [179]
- 16.2.4 Other CT scan [180]
- 16.3 Myelogram [181]
- 16.4 Mammography [182]
- 16.5 Routine chest X-ray [183]
- 16.6 Intraoperative cholangiogram [184]
- 16.7 Upper gastrointestinal X-ray [185]
- 16.8 Lower gastrointestinal X-ray [186]
- 16.9 Intravenous pyelogram [187]
- 16.1 Cerebral arteriogram [188]
- 16.11 Contrast aortogram [189]
- 16.12 Contrast arteriogram of femoral and lower extremity arteries [190]
- 16.13 Arterio or venogram (not heart and head) [191]
- 16.14 Diagnostic ultrasound

- 16.14.1 Diagnostic ultrasound of head and neck [192]
- 16.14.2 Diagnostic ultrasound of heart (echocardiogram) [193]
- 16.14.3 Diagnostic ultrasound of gastrointestinal tract [194]
- 16.14.4 Diagnostic ultrasound of urinary tract [195]
- 16.14.5 Diagnostic ultrasound of abdomen or retroperitoneum [196]
- 16.14.6 Other diagnostic ultrasound [197]
- 16.15 Magnetic resonance imaging [198]
- 16.16 Electroencephalogram (EEG) [199]
- 16.17 Nonoperative urinary system measurements [200]
- 16.18 Cardiac stress tests [201]
- 16.19 Electrocardiogram [202]
- 16.2 Electrographic cardiac monitoring [203]
- 16.21 Swan-Ganz catheterization for monitoring [204]
- 16.22 Arterial blood gases [205]
- 16.23 Microscopic examination (bacterial smear; culture; toxicology) [206]
- 16.24 Radioisotope scan
 - 16.24.1 Radioisotope bone scan [207]
 - 16.24.2 Radioisotope pulmonary scan [208]
 - 16.24.3 Radioisotope scan and function studies [209]
 - 16.24.4 Other radioisotope scan [210]
- 16.25 Therapeutic radiology [211]
- 16.26 Physical therapy
 - 16.26.1 Diagnostic physical therapy [212]
 - 16.26.2 Physical therapy exercises; manipulation; and other procedures [213]
 - 16.26.3 Traction; splints; and other wound care [214]
 - 16.26.4 Other physical therapy and rehabilitation [215]
- 16.27 Respiratory intubation and mechanical ventilation [216]
 - 16.27.1 Endotracheal intubation
 - 16.27.2 Continuous mechanical ventilation less than 96 hours
 - 16.27.3 Continuous mechanical ventilation 96 hours or more
 - 16.27.4 Other respiratory intubation and mechanical ventilation
- 16.28 Other respiratory therapy [217]
 - 16.28.1 Respiratory medication administered by nebulizer
 - 16.28.2 Oxygen therapy
 - 16.28.3 Other respiratory treatments
- 16.29 Psychological and psychiatric evaluation and therapy [218]
 - 16.29.1 Psychiatric drug therapy
 - 16.29.2 Electroconvulsive therapy
 - 16.29.3 Individual psychotherapy
 - 16.29.4 Other psychological and psychiatric evaluation and therapy
- 16.3 Alcohol and drug rehabilitation/ detoxification [219]
 - 16.30.1 Alcohol rehabilitation
 - 16.30.2 Alcohol detoxification
 - 16.30.3 Alcohol rehabilitation and detoxification
 - 16.30.4 Drug rehabilitation
 - 16.30.5 Drug detoxification
 - 16.30.6 Drug rehabilitation and detoxification
 - 16.30.7 Alcohol and drug rehabilitation
 - 16.30.8 Alcohol and drug detoxification
 - 16.30.9 Alcohol and drug rehabilitation and detoxification

- 16.31 Ophthalmologic and otologic diagnosis and treatment [220]
- 16.32 Nasogastric tube [221]
- 16.33 Blood transfusion [222]
- 16.34 Enteral and parenteral nutrition [223]
- 16.35 Cancer chemotherapy [224]
- 16.36 Conversion of cardiac rhythm [225]
- 16.37 Other diagnostic radiology and related techniques [226]
- 16.38 Other diagnostic procedures (interview; evaluation; consultation) [227]
- 16.39 Prophylactic vaccinations and inoculations [228]
- 16.4 Nonoperative removal of foreign body [229]
- 16.41 Extracorporeal shock wave lithotripsy; other than urinary [230]
- 16.42 Other therapeutic procedures [231]
 - 16.42.1 Inject antibiotic
 - 16.42.3 Injection of Thromobolytic Agent (not coronary)
 - 16.42.4 Other therapies