

SUPPLEMENTAL DIGITAL CONTENT 1: DEFINITION OF COMORBIDITIES (ICD-10).

A - CARDIOVASCULAR :

1 - ISCHEMIC HEART DISEASE

- I20.x - Angina pectoris
- I25.x - Chronic ischemic heart disease
- Z95.5 - Presence of coronary angioplasty implant and graft

2 - CARDIAC, ARRHYTHMIA OR HEART BLOCKS

- I44.1 - Atrioventricular block, second degree
- I44.2 - Atrioventricular block, complete
- I44.3 - Other and unspecified atrioventricular block
- I45.6 - Pre-excitation syndrome
- I45.9 - Conduction disorder, unspecified
- I47.x - Paroxysmal tachycardia
- I49.x - Other cardiac arrhythmias
- R00.0 - Tachycardia, unspecified
- R00.1 - Bradycardia, unspecified
- R00.8 - Other and unspecified abnormalities of heart beat
- Z95.0 - Tachycardia, unspecified

3 - ATRIAL FIBRILLATION

- I48.x - Atrial fibrillation and flutter

4 - CHRONIC HEART FAILURE or CARDIOMYOPATHY

- I11.0 - Hypertensive heart disease with (congestive) heart failure
- I13.0 - Hypertensive heart and renal disease with (congestive) heart failure
- I13.2 - Hypertensive heart and renal disease with both (congestive) heart failure and renal failure
- I42.0 - Dilated cardiomyopathy
- I42.5 - Other restrictive cardiomyopathy, Constrictive cardiomyopathy.
- I42.6 - Alcoholic cardiomyopathy
- I42.7 - Cardiomyopathy due to drugs and other external agents
- I42.8 - Other cardiomyopathies
- I42.9 - Cardiomyopathy, unspecified; Cardiomyopathy.
- I43.x - Cardiomyopathy in diseases classified elsewhere

5 - VALVULAR DISEASE

- I05.x - Rheumatic mitral valve diseases
- I06.x - Rheumatic aortic valve diseases
- I07.x - Rheumatic tricuspid valve diseases
- I08.x - Multiple valve diseases

I34.x - Nonrheumatic mitral valve disorders
I35.x - Nonrheumatic aortic valve disorders
I36.x - Nonrheumatic tricuspid valve disorders
I37.x - Pulmonary valve disorders
I38.x - Endocarditis, valve unspecified
I39.x - Endocarditis and heart valve disorders in diseases classified elsewhere
Q23.0 - Congenital stenosis of aortic valve
Q23.1 - Congenital insufficiency of aortic valve
Q23.2 - Congenital mitral stenosis
Q23.3 - Congenital mitral insufficiency
Z95.2 - Presence of prosthetic heart valve
Z95.3 - Presence of xenogenic heart valve
Z95.4 - Presence of other heart-valve replacement

6 - PERIPHERAL VASCULAR DISEASE or ABDOMINAL AORTIC ANEURYSM

I70.x - Atherosclerosis
I70.1 - Thoracic aortic aneurysm, without mention of rupture
I70.4 - Abdominal aortic aneurysm, without mention of rupture
I70.6 - Thoracoabdominal aortic aneurysm, without mention of rupture
I70.9 - Aortic aneurysm of unspecified site, without mention of rupture
I73.1 - Thromboangiitis obliterans [Buerger]
I73.8 - Other specified peripheral vascular diseases
I73.9 - Peripheral vascular disease, unspecified
I79.0 - Disorders of arteries, arterioles and capillaries in diseases classified elsewhere
K55.1 - Chronic vascular disorders of intestine
K55.8 - Other vascular disorders of intestine
K55.9 - Vascular disorder of intestine, unspecified
Z95.8 - Presence of other cardiac and vascular implants and grafts
Z95.9 - Presence of cardiac and vascular implant and graft, unspecified

7 - HYPERTENSION

I10.x - Essential (primary) hypertension
I11.x - Hypertensive heart disease
I12.x - Hypertensive renal disease
I13.x - Hypertensive heart and renal disease
I15.x - Secondary hypertension

B - NEUROLOGIC HISTORY:

8 - PSYCHOSES

- F20.x - Schizophrenia
- F22.x - Persistent delusional disorders
- F23.x - Acute and transient psychotic disorders
- F24.x - Induced delusional disorder
- F25.x - Schizoaffective disorders
- F28.x - Other nonorganic psychotic disorders
- F29.x - Unspecified nonorganic psychosis
- F30.2 - Mania with psychotic symptoms
- F31.2 - Bipolar affective disorder, current episode manic with psychotic symptoms
- F31.5 - Bipolar affective disorder, current episode severe depression with psychotic symptoms

9 - DEPRESSION

- F20.4 - Post-schizophrenic depression
- F31.3 - Bipolar affective disorder, current episode mild or moderate depression
- F31.4 - Bipolar affective disorder, current episode severe depression without psychotic symptoms
- F31.5 - Bipolar affective disorder, current episode severe depression with psychotic symptoms
- F32.x - Depressive episode
- F33.x - Recurrent depressive disorder
- F34.1 - Dysthymia
- F41.2 - Mixed anxiety and depressive disorder
- F43.2 - Adjustment disorders

10 - DEMENTIA

- F00.x - Dementia in Alzheimer disease
- F01.x - Vascular dementia
- F02.x - Dementia in other diseases classified elsewhere
- F03.x - Unspecified dementia
- G30.x - Alzheimer disease with early onset
- G31.x - Other degenerative diseases of nervous system, not elsewhere classified

11 - CEREBROVASCULAR DISEASE

- G45.x - Transient cerebral ischaemic attacks and related syndromes
- G46.x - Vascular syndromes of brain in cerebrovascular diseases
- I69.x - Sequelae of cerebrovascular disease

12 – HEMIPLEGIA, PARAPLEGIA OR PARALYTIC SYNDROME

- G04.1 - Tropical spastic paraplegia
- G11.4 - Hereditary spastic paraplegia
- G80.1 - Spastic diplegic cerebral palsy
- G80.2 - Spastic hemiplegic cerebral palsy
- G81.x - Hemiplegia

G82.x - Paraplegia and tetraplegia
G83.0 - Diplegia of upper limbs
G83.1 - Monoplegia of lower limb
G83.2 - Monoplegia of upper limb
G83.3 - Monoplegia, unspecified
G83.4 - Cauda equina syndrome
G83.9 - Paralytic syndrome, unspecified

C - RESPIRATORY HISTORY

13 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE

J43.x - Emphysema
J44.x - Other chronic obstructive pulmonary disease

14 - PULMONARY CIRCULATION DISORDERS

I27.x - Primary pulmonary hypertension
I28.8 - Other specified diseases of pulmonary vessels
I28.9 - Disease of pulmonary vessels, unspecified

15 - CHRONIC RESPIRATORY FAILURE

J96.1 - Chronic respiratory failure

D - OTHERS

16 – CHRONIC ALCOHOL ABUSES

F10 - Mental and behavioural disorders due to use of alcohol
E52 - Niacin deficiency [pellagra]
G62.1 - Alcoholic polyneuropathy
I42.6 - Alcoholic cardiomyopathy
K29.2 - Alcoholic gastritis
K70.x - Alcoholic liver disease
T51.x - Toxic effect of alcohol
Z50.2 - Alcohol rehabilitation
Z71.4 - Alcohol abuse counselling and surveillance
Z72.1 - Alcohol use

17 – CANCER: ANY MALIGNANCY, INCLUDING LYMPHOMA AND LEUKEMIA.

C00.x to C75.x - Malignant neoplasms, stated or presumed to be primary, of specified sites, except of lymphoid, hematopoietic and related tissue
C76.x - Malignant neoplasm of other and ill-defined sites
C80.x - Malignant neoplasm, without specification of site
C81.x to C96.x - Malignant neoplasms, stated or presumed to be primary, of lymphoid, hematopoietic and related tissue

C97.x - Malignant neoplasms of independent (primary) multiple sites

Z85.x - Personal history of malignant neoplasm

Z86.0 - Personal history of other neoplasms

18 - DEFICIENCY ANEMIA

D50.x - Iron deficiency anemia

D51.x - Vitamin B12 deficiency anemia

D52.x - Folate deficiency anemia

D53.x - Other nutritional anemia.

19 - DIABETES

E10.0 to E10.9 - Insulin-dependent diabetes mellitus

E11.0 to E11.9 - Non-insulin-dependent diabetes mellitus

E12.0 to E12.9 - Malnutrition-related diabetes mellitus

E13.0 to E13.9 - Other specified diabetes mellitus

E14.0 to E14.9 - Unspecified diabetes mellitus

20 - DRUG ABUSES

F11.x - Mental and behavioural disorders due to use of opioids

F12.x - Mental and behavioural disorders due to use of cannabinoids

F13.x - Mental and behavioural disorders due to use of sedatives or hypnotics

F14.x - Mental and behavioural disorders due to use of cocaine

F15.x - Mental and behavioural disorders due to use of other stimulants, including caffeine

F16.x - Mental and behavioural disorders due to use of hallucinogens

F18.x - Mental and behavioural disorders due to use of volatile solvents

F19.x - Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances

Z71.5 - Drug abuse counselling and surveillance

Z72.2 - Drug use

21 - TRANSPLANTED ORGAN

Z94.0 - Kidney transplant status

Z94.1 - Heart transplant status

Z94.2 - Lung transplant status

Z94.3 - Heart and lungs transplant status

Z94.4 - Liver transplant status

22 - LIVER DISEASE

B18.x - Chronic viral hepatitis

I85.x - Oesophageal varices

I86.4 - Gastric varices

I98.2 - Esophageal varices without bleeding in diseases classified elsewhere

K70.x - Alcoholic liver disease

K71.1 - Toxic liver disease with hepatic necrosis

K71.3 - Toxic liver disease with chronic persistent hepatitis
K71.4 - Toxic liver disease with chronic lobular hepatitis
K71.5 - Toxic liver disease with chronic active hepatitis
K71.7 - Toxic liver disease with fibrosis and cirrhosis of liver
K72.x - Hepatic failure, not elsewhere classified
K73.x - Chronic hepatitis, not elsewhere classified
K74.x - Fibrosis and cirrhosis of liver
K76.x - Other diseases of liver
Z94.4 - Liver transplant status

23 - METASTATIC SOLID TUMOR

C77.x - Secondary and unspecified malignant neoplasm of lymph nodes
C78.x - Secondary malignant neoplasm of respiratory and digestive organs
C79.x - Secondary malignant neoplasm of other and unspecified sites

24 - OBESITY

E66.x - Obesity due to excess calories

25 - PREAMMISSION DIALYSIS

Z99.2 - Dependence on renal dialysis
Z49.1 - Extracorporeal dialysis
Z49.2 - Other dialysis

26 - RENAL FAILURE

I12.0 - Hypertensive renal disease with renal failure
I13.1 - Hypertensive heart and renal disease with (congestive) heart failure
N18.1 - Chronic kidney disease, stage 1
N18.2 - Chronic kidney disease, stage 2
N18.3 - Chronic kidney disease, stage 3
N18.4 - Chronic kidney disease, stage 4
N18.5 - Chronic kidney disease, stage 5
N18.9 - Chronic kidney disease, unspecified
N19.x - Unspecified kidney failure