ICD-10-CM Chapter 9: Diseases of the Circulatory System

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Objectives

- Organization ICD-10
  - Differences in I-9 and I-10
  - Comparison I-9 and I-10
  - Case Study
  - Guidelines
  - References and Resources

Organization of ICD-10-CM

	Chapter	Chapter Description
8.	H60 - H95	Diseases of the ear and mastoid process
9.	**I00 – I99**	**Diseases of the circulatory system**
10.	J00 – J99	Diseases of the respiratory system
11.	K00 – K95	Diseases of the digestive system
12.	L00– L99	Diseases of the skin and subcutaneous tissue
13.	M00 – M99	Diseases of the musculoskeletal system and connective tissue
14.	N00 – N99	Disease of the genitourinary system

ICD-9-CM Hypertension Table

Hypertension, hypertensive

	Malignant	Benign	Unspecified
Hypertension, hypertensive (arterial) (arteriolar) (crisis) (degeneration) (disease) (essential) (fluctuating) (idiopathic) (intermittent) (labile) (low renin) (orthostatic) (paroxysmal) (primary) (systemic) (uncontrolled) (vascular)	401.0	401.1	401.9
with			
chronic kidney disease			
stage I through stage IV, or unspecified	403.00	403.10	403.90
stage V or end stage renal disese	403.01	403.11	403.91
heart involvement (conditions classifiable to 429.0–429.3, 429.8, 429.9 due to hypertension) (*see also* Hypertension, heart)	402.00	402.10	402.90
with kidney involvement — *see* Hypertension, cardiorenal			
renal (kidney) involvement (only conditions classifiable to 585, 587) (excludes conditions classifiable to 584) (*see also* Hypertension, kidney)	403.00	403.10	403.90
with heart involvement — *see* Hypertension, cardiorenal			
failure (and sclerosis) (*see also* Hypertension, kidney)	403.01	403.11	403.91
sclerosis without failure (*see also* Hypertension, kidney)	403.00	403.10	403.90
accelerated (*see also* Hypertension, by type, malignant))	401.0	—	—
antepartum — *see* Hypertension, complicating pregnancy, childbirth, or the puerperium			
borderline	—	—	796.2
cardiorenal (disease)	404.00	404.10	404.90
with			
chronic kidney disease			
stage I through stage IV, or unspecified	404.00	404.10	404.90
and heart failure	404.01	404.11	404.91
stage V or end stage renal disease	404.02	404.12	404.92
and heart failure	404.03	404.13	404.93
heart failure	404.01	404.11	404.91
and chronic kidney disease	404.01	404.11	404.91
stage I through stage IV or unspecified	404.01	404.11	404.91

	Malignant	Benign	Unspecified
Hypertension, hypertensive — *continued*			
due to — *continued*			
calculus — *continued*			
ureter	405.09	405.19	405.99
coarctation, aorta	405.09	405.19	405.99
Cushing's disease	405.09	405.19	405.99
glomerulosclerosis (*see also* Hypertension, kidney)	403.00	403.10	403.90
periarteritis nodosa	405.09	405.19	405.99
pheochromocytoma	405.09	405.19	405.99
polycystic kidney(s)	405.09	405.19	405.99
polycythemia	405.09	405.19	405.99
porphyria	405.09	405.19	405.99
pyelonephritis	405.09	405.19	405.99
renal (artery)			
aneurysm	405.01	405.11	405.91
anomaly	405.01	405.11	405.91
embolism	405.01	405.11	405.91
fibromuscular hyperplasia	405.01	405.11	405.91
occlusion	405.01	405.11	405.91
stenosis	405.01	405.11	405.91
thrombosis	405.01	405.11	405.91
encephalopathy	437.2	—	—
gestational (transient) NEC	—	—	642.3
Goldblatt's	440.1	—	—
heart (disease) (conditions classifiable to 429.0–429.3, 429.8, 429.9 due to hypertension)	402.00	402.10	402.90
with heart failure	402.01	402.11	402.91
hypertensive kidney disease (conditions classifiable to 403) (*see also* Hypertension, cardiorenal)	404.00	404.10	404.90
renal sclerosis (*see also* Hypertension, cardiorenal)	404.00	404.10	404.90
intracranial, benign	—	348.2	—
intraocular	—	—	365.04
kidney	403.00	403.10	403.90
with			
chronic kidney disease			
stage I through stage IV, or unspecified	403.00	403.10	403.90

Comparison of I-9 and I-10

Hypertension I-9	Malignant	Benign	Unspecified	I-10 Hypertension
Hypertension, hypertensive	401.0	401.1	401.9	I10 Essential (primary) hypertension
with CKD stage I-IV, or unspecified	403.00	403.10	403.90	I12.9 Hypertensive chronic kidney disease with stage 1-4 CKD, or unspecified chronic kidney disease
with CKD stage V or ESRD	403.01	403.11	403.91	I12.0 Hypertensive chronic kidney disease with stage 5 CKD or end stage renal disease
Hypertensive Heart	402.00	402.10	402.90	I11.9 Hypertensive heart disease without heart failure
Cardiorenal (disease)	404.00	404.10	404.90	I13.10 Hypertensive heart and chronic kidney disease without heart failure, with stage 1- 4 CKD, or unspecified CKD

Case Study

Maxwell is hospitalized with a diagnosis of congestive heart failure due to hypertensive heart disease. He also has Stage 5 chronic kidney failure. The patient has been prescribed Lasix previously but admits he forgets to take his medication every day. This is due to his advanced age. What are his diagnosis code(s)?

congestive heart failure due to hypertensive heart disease. He also has Stage 5 chronic kidney failure

Hypertension, hypertensive (accelerated) (benign) (essential) (idiopathic) (malignant) (systemic) I10
- with
- - heart involvement (conditions in I51.4 - I51.9 due to hypertension) —*see* Hypertension, heart
- - kidney involvement —*see* Hypertension, kidney
- benign, intracranial G93.2
- borderline R03.0
- cardiorenal (disease) I13.10
- - with heart failure I13.0
- - - with stage 1 through stage 4 chronic kidney disease I13.0
- - - with stage 5 or end stage renal disease I13.2
- - without heart failure I13.10

I13.2 Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease

Use additional code to identify type of heart failure (I50.-)

Use additional code to identify the stage of chronic kidney disease (N18.5, N18.6)

Index and Tabular View

I50.9 **Heart failure, unspecified**
Biventricular (heart) failure NOS
Cardiac, heart or myocardial failure NOS
Congestive heart disease
Congestive heart failure NOS
Right ventricular failure (secondary to left heart failure)

Excludes1: fluid overload (E87.70)

Tabular

N18 Chronic kidney disease (CKD)

Code first any associated:
diabetic chronic kidney disease (E08.22, E09.22, E10.22, E11.22, E13.22)
hypertensive chronic kidney disease (I12.-, I13.-)

Use additional code to identify kidney transplant status, if applicable, (Z94.0)

N18.1 Chronic kidney disease, stage 1

N18.2 Chronic kidney disease, stage 2 (mild)

N18.3 Chronic kidney disease, stage 3 (moderate)

N18.4 Chronic kidney disease, stage 4 (severe)

N18.5 Chronic kidney disease, stage 5

Excludes1: chronic kidney disease, stage 5 requiring chronic dialysis (N18.6)

N18.6 End stage renal disease

ICD-10-CM Drug Table

Substance	Poisoning, Accidental (unintentional)	Poisoning, Intentional self-harm	Poisoning, Assault	Poisoning, Undetermined	Adverse effect	Underdosing
- bulgaricus	T47.6X1	T47.6X2	T47.6X3	T47.6X4	T47.6X5	T47.6X6
- sporogenes	T47.6X1	T47.6X2	T47.6X3	T47.6X4	T47.6X5	T47.6X6
Lactoflavin	T45.2X1	T45.2X2	T45.2X3	T45.2X4	T45.2X5	T45.2X6
Lactose(as excipient)	T50.901	T50.902	T50.903	T50.904	T50.905	T50.906
Lactuca(virosa) (extract)	T42.6X1	T42.6X2	T42.6X3	T42.6X4	T42.6X5	T42.6X6
Lactucarium	T42.6X1	T42.6X2	T42.6X3	T42.6X4	T42.6X5	T42.6X6
Lactulose	T47.3X1	T47.3X2	T47.3X3	T47.3X4	T47.3X5	T47.3X6
Laevo—*see Levo-*						
Lanatosides	T46.0X1	T46.0X2	T46.0X3	T46.0X4	T46.0X5	T46.0X6
Lanolin	T49.3X1	T49.3X2	T49.3X3	T49.3X4	T49.3X5	T49.3X6
Largactil	T43.3X1	T43.3X2	T43.3X3	T43.3X4	T43.3X5	T43.3X6
Larkspur	T62.2X1	T62.2X2	T62.2X3	T62.2X4	--	--
Laroxyl	T43.011	T43.012	T43.013	T43.014	T43.015	T43.016
Lasix	T50.1X1	T50.1X2	T50.1X3	T50.1X4	T50.1X5	T50.1X6
Lassar's paste	T49.4X1	T49.4X2	T49.4X3	T49.4X4	T49.4X5	T49.4X6

Tabular

T50.1	**Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics**	
	T50.1X	**Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics**
		T50.1X1 **Poisoning by loop [high-ceiling] diuretics, accidental (unintentional)** Poisoning by loop [high-ceiling] diuretics NOS
		T50.1X2 **Poisoning by loop [high-ceiling] diuretics, intentional self-harm**
		T50.1X3 **Poisoning by loop [high-ceiling] diuretics, assault**
		T50.1X4 **Poisoning by loop [high-ceiling] diuretics, undetermined**
		T50.1X5 **Adverse effect of loop [high-ceiling] diuretics**
		T50.1X6 **Underdosing of loop [high-ceiling] diuretics**

The appropriate 7th character is to be added to each code from category T50
- A - initial encounter
- D - subsequent encounter
- S - sequela

Index and Tabular

Z91.1 Patient's noncompliance with medical treatment and regimen

Z91.11 Patient's noncompliance with dietary regimen

Z91.12 Patient's intentional underdosing of medication regimen

Code first underdosing of medication (T36-T50) with fifth or sixth character 6

Excludes1: adverse effect of prescribed drug taken as directed- code to adverse effect
poisoning (overdose) -code to poisoning

Z91.120 Patient's intentional underdosing of medication regimen due to financial hardship

Z91.128 Patient's intentional underdosing of medication regimen for other reason

Z91.13 Patient's unintentional underdosing of medication regimen

Code first underdosing of medication (T36-T50) with fifth or sixth character 6

Excludes1: adverse effect of prescribed drug taken as directed- code to adverse effect
poisoning (overdose) -code to poisoning

Z91.130 Patient's unintentional underdosing of medication regimen due to age-related debility

Case Study Answer

- **I13.2** *Disease, diseased, heart (organic), hypertensive – see Hypertension, heart*. Hypertension, hypertensive (accelerated) (benign) (essential) (idiopathic) (malignant) (systemic), heart (disease) with kidney disease (chronic) – *see* Hypertension, cardiorenal (disease), with heart failure, with stage 5 or end stage renal disease
  - The "use additional code" note indicates to identify the type of heart failure
  - The "use additional code" note indicates to identify the stage of chronic kidney disease
- **I50.9** Failure, heart (acute) (sudden), congestive (compensated) (decompensated).
- **N18.5** Disease, diseased, kidney (functional) (pelvis), chronic, stage 5.
- **T50.1x6A** Refer to Table of Drugs and Chemicals, Lasix, underdosing
- **Z91.130** Noncompliance, medication regimen, underdosing, unintentional, due to patient's age-related debility

Guidelines

- True or False?

If a patient has both acute systolic heart failure and hypertension, no causal condition relationship needs to be documented to use the combination code I11.0

Guidelines

- **Answer: *False***

Rational: ICD-10-CM Coding Guideline I.C.9.a.1, Hypertension with heart disease, states “Heart conditions classified to I50.- or I51.9 are assigned to a code from category I11, Hypertensive heart disease when a causal relationship is stated (due to hypertension) or implied (hypertensive).

Use an additional code from category I50, heart failure, to identify the type of heart failure in those patients with heart failure. The same heart conditions with hypertension, but without a stated relationship, are coded separately.”

Guidelines

- True or False?

Uncontrolled hypertension and controlled hypertension have different codes in ICD-10-CM

Guidelines

- **Answer: *False***

Rational: ICD-10-CM does not differentiate between uncontrolled and controlled hypertension.

References and Resources

- http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf
- http://www.montanahima.net/pdf/ICD-10-CM spring 2011 handout.ppt
- AHIMA ICD-10-CM Coder Training Manual 2013 Instructor's Edition

Questions??

Thank you!