

## Supplementary data

### CIE-9 codes for atrial fibrillation definition

	<b>Atrial fibrillation</b>
427.31	Atrial fibrillation
427.32	Atrial flutter
	<b>Nonvalvular definition</b>
	<b>Valve diseases</b>
394.0	Mitral stenosis
394.1	Rheumatic mitral regurgitation
395	Aortic valve diseases
396	Mitral and aortic valve diseases
	<b>Mechanical prostheses</b>
35.22	Other aortic valve substitution
35.24	Other mitral valve substitution

### CIE-9 codes for hemorrhage

	<b>Type of hemorrhage</b>
	<b>Digestive hemorrhage high</b>
456.0	Esophageal varices with hemorrhage
456.20	Esophageal varices with hemorrhage with other disease
530.21	Esophageal ulcer with hemorrhage
530.82	Esophageal hemorrhage
531.0	Acute gastric ulcer with hemorrhage
531.2	Acute gastric ulcer with hemorrhage and perforation
531.4	Gastric ulcer chronic or unspecified with hemorrhage
531.6	Gastric ulcer chronic or unspecified with hemorrhage and perforation
535.01	Acute gastritis with hemorrhage
535.11	Atrophic gastritis with hemorrhage
535.21	Gastric mucose hypertrophy with hemorrhage
535.31	Alcoholic gastritis with hemorrhage
535.41	Other unspecified gastritis with hemorrhage
535.71	Eosinophilic gastritis with hemorrhage
578.0	Hematemesis
	<b>Low</b>
532.0	Acute duodenal ulcer with hemorrhage
532.2	Acute duodenal ulcer with hemorrhage and perforation
532.4	Duodenal ulcer chronic or unspecified with hemorrhage
532.6	Gastric ulcer chronic or unspecified with hemorrhage and perforation
533.0	Acute peptic ulcer with hemorrhage
533.2	Acute peptic ulcer with hemorrhage and perforation
533.4	Chronic or unspecified peptic ulcer with hemorrhage
533.6	Chronic or unspecified peptic ulcer with hemorrhage and perforation
534.0	Acute gastrojejunal ulcer with hemorrhage
534.2	Acute gastrojejunal ulcer with hemorrhage and perforation
534.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
534.6	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation
535.61	Duodenitis with hemorrhage
569.3	Rectal and anal hemorrhage

578.1	Blood in feces
	<b>Unspecified</b>
535.51	Gastritis and gastroduodenitis unspecified with hemorrhage
578.9	Unspecified gastrointestinal bleeding
	<b>Respiratory airway hemorrhages</b>
786.30	Hemoptysis, unspecified
786.39	Other types of hemoptysis
784.8	Throat hemorrhage
	<b>Cerebral hemorrhages</b>
430	Subarachnoidal hemorrhage
431	Intracerebral hemorrhage
432	Other intracranial hemorrhage
	<b>Genito-urinary</b>
593.81	Renal vascular alteration
596.8	Other bladder alteration
599.7	Hematuria
602.1	Congestion or prostate hemorrhage
608.83	Vascular alteration of the male genitalia
	<b>Retinian</b>
362.81	Retinian hemorrhage
	<b>Gynecological</b>
621.4	Hematometra
622.8	Other inflammatory unspecified disorders of the cervix
623.8	Other inflammatory unspecified disorders of the vagina
626.5	Ovulation hemorrhage
626.6	Metrorrhagia
626.7	Postcoital hemorrhage
626.8	Other menstrual disorder and abnormal hemorrhage
627.0	Premenopausal hemorrhage
627.1	Postmenopausal hemorrhage
666.1	Other postpartum acute hemorrhage
666.2	Other postpartum subacute or secondary hemorrhage
	<b>Otorhynolaryngology</b>
388.69	Other otorrhea
784.7	Epistaxis
	<b>Unspecified</b>
285.1	Post-acute hemorrhagic anemia
286.5	Hemorrhagic disturbances related to anticoagulants
287.8	Other hemorrhagic conditions
459.0	Unspecified hemorrhagia