

**Supplementary Table 1. ICD-9 and ICD-10 diagnosis codes for Alzheimer's disease and related dementias (ADRD) / mild cognitive impairment (MCI) and chronic conditions<sup>43</sup>**

Medical Conditions	Code	Definition
<b>Mild Cognitive Impairment</b>		
ICD9	331.83	Mild cognitive impairment, so stated
ICD10	G31.84	Mild cognitive impairment, so stated
<b>Alzheimer's disease and related dementias</b>		
<b>Alzheimer's disease</b>		
ICD9	331.0	Alzheimer's disease
ICD10	G30	Alzheimer's disease
	G30.0	Alzheimer's disease with early onset
	G30.1	Alzheimer's disease with late onset
	G30.8	Other Alzheimer's disease
	G30.9	Alzheimer's disease, unspecified
<b>Vascular dementia</b>		
ICD9	290.4	Vascular dementia
	290.40	Vascular dementia, uncomplicated
	290.41	Vascular dementia, with delirium
	290.42	Vascular dementia, with delusions
	290.43	Vascular dementia, with depressed mood
ICD10	F01	Vascular dementia
	F01.5	Vascular dementia
	F01.50	Vascular dementia without behavioral disturbance
	F01.51	Vascular dementia with behavioral disturbance
<b>Lewy Body Dementia</b>		
ICD9	331.82	Dementia with Lewy bodies
ICD10	G31.83	Dementia with Lewy bodies
<b>Frontotemporal Dementia</b>		
ICD9	331.1	Frontotemporal Dementia
	331.11	Pick's disease
	331.19	Other frontotemporal dementia
ICD10	G31.0	Frontotemporal Dementia
	G31.01	Pick's disease
	G31.09	Other frontotemporal dementia
<b>Mental Health Disorders</b>		
<b>Anxiety</b>		
ICD9	300.0	Anxiety states
	300.00	Anxiety state, unspecified
	300.02	Generalized anxiety disorder
ICD10	F41	Other Anxiety disorders
	F41.0	Panic disorder [episodic paroxysmal anxiety]
	F41.1	Generalized anxiety disorder
	F41.8	Other specified anxiety disorders
	F41.9	Anxiety disorder, unspecified
<b>Major Depressive Disorder</b>		
ICD9	296.2	Major depressive disorder, single episode
	296.3	Major depressive disorder, recurrent
ICD10	F32.0-F32.9	Major depressive disorder
	F32.A	Depression, unspecified
	F33.0-F33.9	Major depressive disorder, recurrent
<b>Bipolar Disorder</b>		

ICD9	296.0-296.9	Bipolar disorders
ICD10	F31.0-F31.9	Bipolar disorders
<b>Psychotic Disorder</b>		
ICD9	295.0-295.9	Schizophrenic disorders
	297.0-297.9	Delusional disorders
ICD10	F20.0-F20.9	Schizophrenia
	F22	Delusional disorders
	F23	Brief psychotic disorder
	F24	Shared psychotic disorder
	F25.0, F25.1, F25.8, F25.9	Schizoaffective disorders
	F28	Other psychotic disorder not due to a substance or known physiological condition
	F29	Unspecified psychosis not due to a substance or known physiological condition
<b>Sleep Disorder</b>		
ICD9	307.4	Specific disorder of sleep of nonorganic origin
	327.0-327.8	Organic sleep disorders
	780.5	Sleep disturbances
ICD10	G47.0-G47.9	Sleep disorder
<b>Chronic Conditions</b>		
<b>Hypertension</b>		
ICD9	401.0, 401.1, 401.9	Essential hypertension
	405.0, 405.1, 405.9	Secondary hypertension
ICD10	I10	Essential (primary) hypertension
	I15	Secondary hypertension
	I1A	Other hypertension
<b>Cerebrovascular Disease</b>		
ICD9	436	Acute, but ill-defined, cerebrovascular disease
	437.0-437.9	Other and ill-defined cerebrovascular disease
	438.0-438.9	Late effects of cerebrovascular disease
ICD10	I67.0-I67.9	Other cerebrovascular diseases
	I68.0, I68.2, I68.8	Cerebrovascular disorders in diseases classified elsewhere
	I69.8, I69.9	Sequelae of cerebrovascular disease
<b>Cerebral infarction</b>		
ICD9		
	433.01	Occlusion and stenosis of basilar artery with cerebral infarction
	433.11	Occlusion and stenosis of carotid artery with cerebral infarction
	433.21	Occlusion and stenosis of vertebral artery with cerebral infarction
	433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction
	433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction
	433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction
	434.01	Cerebral thrombosis with cerebral infarction
	434.11	Cerebral embolism with cerebral infarction
	434.91	Cerebral artery occlusion, unspecified with cerebral infarction
ICD10	I63.0-I63.9	Cerebral infarction
<b>Overweight and Obesity</b>		
ICD9	278.0	Overweight and obesity

	278.00	Obesity, unspecified
	278.01	Morbid obesity
	278.02	Overweight
	278.03	Obesity hypoventilation syndrome
ICD10	E66.0-E66.9	Overweight and obesity
<b>Diabetes</b>		
ICD9	250.0-250.9	Diabetes mellitus (Type 1 & 2)
ICD10	E10.1-E10.9	Type 1 diabetes mellitus
	E11.1-E11.9	Type 2 diabetes mellitus
<b>Coronary artery disease</b>		
ICD9	414.0	Coronary atherosclerosis
	414.2	Chronic total occlusion of coronary artery
	414.3	Coronary atherosclerosis due to lipid rich plaque
	414.4	Coronary atherosclerosis due to calcified coronary lesion
	414.8	Other specified forms of chronic ischemic heart disease
	414.9	Chronic ischemic heart disease, unspecified
ICD10	I25.1	Atherosclerotic heart disease of native coronary artery
	I25.8	Other forms of chronic ischemic heart disease
	I25.9	Chronic ischemic heart disease, unspecified
<b>Heart failure</b>		
ICD9	428.0	Congestive heart failure
	428.1	Left heart failure
	428.2	Systolic heart failure
	428.3	Diastolic heart failure
	428.4	Combined systolic and diastolic heart failure
	428.9	Heart failure, unspecified
ICD10	I50.1	Left ventricular failure, unspecified
	I50.2	Systolic (congestive) heart failure
	I50.3	Diastolic (congestive) heart failure
		Combined systolic (congestive) and diastolic (congestive)
	I50.4	heart failure
	I50.8	Other heart failure
	I50.9	Heart failure, unspecified
<b>Myocardial infarction</b>		
ICD9	410.0-410.9	Acute myocardial infarction
ICD10	I21.0-I21.9	Acute myocardial infarction
	I21.A	Other type of myocardial infarction
		Myocardial infarction with coronary microvascular
	I21.B	dysfunction
<b>Chronic obstructive pulmonary disease</b>		
	493.20	Chronic obstructive asthma, unspecified
	493.21	Chronic obstructive asthma with status asthmaticus
	493.22	Chronic obstructive asthma with (acute) exacerbation
	496	Chronic airway obstruction, not elsewhere classified
ICD10	J44.0	Chronic obstructive pulmonary disease with (acute) lower
		respiratory infection
	J44.1	Chronic obstructive pulmonary disease with (acute)
		exacerbation
	J44.8	Other specified chronic obstructive pulmonary disease
	J44.9	Chronic obstructive pulmonary disease, unspecified
<b>Chronic kidney disease</b>		
ICD9	585.1-585.5	Chronic kidney disease, Stage I-Stage V
	585.6	End stage renal disease
	585.9	Chronic kidney disease, unspecified
ICD10	N18.1-N18.5	Chronic kidney disease, stage 1-Stage 5

	N18.6	End stage renal disease
	N18.9	Chronic kidney disease, unspecified
Chronic liver disease		
ICD9	571.0-571.9	Chronic liver disease and cirrhosis
ICD10	K73.0-K73.9	Chronic hepatitis, not elsewhere classified
Cancer		
ICD9	140-239	Neoplasms
ICD10	C00-C96	Neoplasms
	D00-D49	Neoplasms

Sources:

[43] Du, X. L., Song, L., Schulz, P. E., Xu, H., & Chan, W. (2022). Risk of Developing Alzheimer's Disease and Related Dementias in Association with Cardiovascular Disease, Stroke, Hypertension, and Diabetes in a Large Cohort of Women with Breast Cancer and with up to 26 Years of Follow-Up. *Journal of Alzheimer's disease: JAD*, 87(1), 415–432. <https://doi.org/10.3233/JAD-215657>