

Supplemental Table 1. Codes Used to Define Risk Cohorts

Code Type	Code
DRG	385
DRG	386
DRG	387
DRG	388
DRG	389
DRG	390
DRG	391
DRG	789
DRG	790
DRG	791
DRG	792
DRG	793
DRG	794
DRG	795
ICD-9-CM Diagnosis	V30.xx
ICD-9-CM Diagnosis	V27.0x
ICD-9-CM Diagnosis	V31.xx
ICD-9-CM Diagnosis	V32.xx
ICD-9-CM Diagnosis	V33.xx
ICD-9-CM Diagnosis	V34.xx
ICD-9-CM Diagnosis	V35.xx
ICD-9-CM Diagnosis	V36.xx
ICD-9-CM Diagnosis	V37.xx
ICD-9-CM Diagnosis	V38.xx
ICD-9-CM Diagnosis	V27.2
ICD-9-CM Diagnosis	V27.3
ICD-9-CM Diagnosis	V27.5
ICD-9-CM	V27.6

Diagnosis	
ICD-9-CM Diagnosis	V27.9x
HCPCS	S9562
HCPCS	C9003
HCPCS	J1565
CPT4	90378
CPT5	90379
NDC	54569549100
NDC	54569549200
NDC	60574411101
NDC	60574411201
NDC	60574411301
NDC	60574411401
CPT	00796
CPT	32851
CPT	32852
CPT	32853
CPT	32854
CPT	33935
CPT	33945
CPT	44135
CPT	44136
CPT	50360
CPT	50365
ICD-9 Procedure	33.5x
ICD-9 Procedure	33.6x
ICD-9 Procedure	37.51
ICD-9 Procedure	41.0x
ICD-9 Procedure	41.94
ICD-9 Procedure	46.97
ICD-9 Procedure	50.5x
ICD-9 Procedure	52.8x
ICD-9 Procedure	55.6x
ICD-9-CM Diagnosis	996.8x
ICD-9-CM Diagnosis	V42.xx
ICD-9-CM Diagnosis	277.0x
ICD-9-CM Diagnosis	279.x
ICD-9-CM	748.4

Diagnosis	
ICD-9-CM Diagnosis	748.5
ICD-9-CM Diagnosis	748.6x
ICD-9-CM Diagnosis	748.8
ICD-9-CM Diagnosis	748.9
ICD-9-CM Diagnosis	330.2
ICD-9-CM Diagnosis	335.0
ICD-9-CM Diagnosis	335.1
ICD-9-CM Diagnosis	335.10
ICD-9-CM Diagnosis	335.11
ICD-9-CM Diagnosis	335.2
ICD-9-CM Diagnosis	343.x
ICD-9-CM Diagnosis	356.x
ICD-9-CM Diagnosis	358.1
ICD-9-CM Diagnosis	359.0
ICD-9-CM Diagnosis	359.1
ICD-9-CM Diagnosis	359.21
ICD-9-CM Diagnosis	359.22
ICD-9-CM Diagnosis	359.23
ICD-9-CM Diagnosis	359.9
ICD-9-CM Diagnosis	710.3
ICD-9-CM Diagnosis	740.0

ICD-9-CM Diagnosis	740.1
ICD-9-CM Diagnosis	740.2
ICD-9-CM Diagnosis	741.0x
ICD-9-CM Diagnosis	741.9x
ICD-9-CM Diagnosis	742.x
ICD-9-CM Diagnosis	754.2
ICD-9-CM Diagnosis	756.1x
ICD-9-CM Diagnosis	756.6
ICD-9-CM Diagnosis	758.1x
ICD-9-CM Diagnosis	745.0
ICD-9-CM Diagnosis	745.2
ICD-9-CM Diagnosis	745.3
ICD-9-CM Diagnosis	745.4
ICD-9-CM Diagnosis	745.5
ICD-9-CM Diagnosis	745.7
ICD-9-CM Diagnosis	745.8
ICD-9-CM Diagnosis	745.9
ICD-9-CM Diagnosis	746.1
ICD-9-CM Diagnosis	746.2
ICD-9-CM Diagnosis	746.3
ICD-9-CM Diagnosis	746.4
ICD-9-CM	745.10

Diagnosis	
ICD-9-CM Diagnosis	745.11
ICD-9-CM Diagnosis	745.12
ICD-9-CM Diagnosis	745.19
ICD-9-CM Diagnosis	745.60
ICD-9-CM Diagnosis	745.61
ICD-9-CM Diagnosis	745.69
ICD-9-CM Diagnosis	746.00
ICD-9-CM Diagnosis	746.01
ICD-9-CM Diagnosis	746.02
ICD-9-CM Diagnosis	746.09
ICD-9-CM Diagnosis	746.5
ICD-9-CM Diagnosis	746.6
ICD-9-CM Diagnosis	746.7
ICD-9-CM Diagnosis	746.9
ICD-9-CM Diagnosis	747.0
ICD-9-CM Diagnosis	747.3
ICD-9-CM Diagnosis	746.81
ICD-9-CM Diagnosis	746.82
ICD-9-CM Diagnosis	746.83
ICD-9-CM Diagnosis	746.84
ICD-9-CM Diagnosis	746.85

ICD-9-CM Diagnosis	746.87
ICD-9-CM Diagnosis	746.89
ICD-9-CM Diagnosis	747.10
ICD-9-CM Diagnosis	747.11
ICD-9-CM Diagnosis	747.20
ICD-9-CM Diagnosis	747.21
ICD-9-CM Diagnosis	747.22
ICD-9-CM Diagnosis	747.29
ICD-9-CM Diagnosis	747.40
ICD-9-CM Diagnosis	747.41
ICD-9-CM Diagnosis	747.42
ICD-9-CM Diagnosis	747.49
ICD-9 Procedure	38.85
ICD-9 Procedure	38.84
ICD-9 Procedure	39.59
ICD-9 Procedure	37.21
ICD-9 Procedure	37.22
ICD-9 Procedure	37.23
ICD-9 Procedure	88.42
ICD-9 Procedure	88.43
ICD-9 Procedure	88.44
ICD-9 Procedure	88.50
ICD-9 Procedure	88.51
ICD-9 Procedure	88.52
ICD-9 Procedure	88.53
ICD-9 Procedure	88.54
ICD-9 Procedure	88.55
ICD-9 Procedure	88.56
ICD-9 Procedure	88.57
ICD-9 Procedure	88.58
ICD-9 Procedure	39.0

ICD-9 Procedure	35.00
ICD-9 Procedure	35.01
ICD-9 Procedure	35.02
ICD-9 Procedure	35.03
ICD-9 Procedure	35.04
ICD-9 Procedure	35.10
ICD-9 Procedure	35.11
ICD-9 Procedure	35.12
ICD-9 Procedure	35.13
ICD-9 Procedure	35.14
ICD-9 Procedure	35.20
ICD-9 Procedure	35.21
ICD-9 Procedure	35.22
ICD-9 Procedure	35.23
ICD-9 Procedure	35.24
ICD-9 Procedure	35.25
ICD-9 Procedure	35.26
ICD-9 Procedure	35.27
ICD-9 Procedure	35.28
ICD-9 Procedure	35.31
ICD-9 Procedure	35.32
ICD-9 Procedure	35.33
ICD-9 Procedure	35.34
ICD-9 Procedure	35.35
ICD-9 Procedure	35.39
ICD-9 Procedure	35.41
ICD-9 Procedure	35.42
ICD-9 Procedure	35.50
ICD-9 Procedure	35.51
ICD-9 Procedure	35.52
ICD-9 Procedure	35.53
ICD-9 Procedure	35.54
ICD-9 Procedure	35.60
ICD-9 Procedure	35.61
ICD-9 Procedure	35.62
ICD-9 Procedure	35.63
ICD-9 Procedure	35.70
ICD-9 Procedure	35.71
ICD-9 Procedure	35.72
ICD-9 Procedure	35.73
ICD-9 Procedure	35.81
ICD-9 Procedure	35.82
ICD-9 Procedure	35.83

ICD-9 Procedure	35.84
ICD-9 Procedure	35.91
ICD-9 Procedure	35.92
ICD-9 Procedure	35.93
ICD-9 Procedure	35.94
ICD-9 Procedure	35.95
ICD-9 Procedure	35.98
ICD-9 Procedure	35.99
ICD-9 Procedure	36.99
ICD-9 Procedure	37.33
ICD-9 Procedure	37.36
ICD-9 Procedure	37.51
ICD-9 Procedure	37.52
ICD-9 Procedure	39.21
ICD-9 Procedure	38.34
ICD-9 Procedure	38.35
ICD-9 Procedure	38.44
ICD-9 Procedure	38.45
ICD-9 Procedure	38.64
ICD-9 Procedure	38.65
ICD-9 Procedure	38.84
ICD-9 Procedure	38.85
ICD-9 Procedure	39.49
ICD-9 Procedure	39.56
ICD-9 Procedure	39.57
ICD-9 Procedure	39.58
ICD-9 Procedure	39.59
ICD-9 Procedure	35.00
ICD-9 Procedure	35.01
ICD-9 Procedure	35.02
ICD-9 Procedure	35.03
ICD-9 Procedure	35.04
ICD-9 Procedure	35.41
ICD-9 Procedure	35.42
ICD-9 Procedure	35.51
ICD-9 Procedure	35.71
ICD-9 Procedure	35.53
ICD-9 Procedure	35.72
ICD-9 Procedure	35.41
ICD-9 Procedure	35.52
CPT	33400
CPT	33403
CPT	33405

CPT	33406
CPT	33412
CPT	33413
CPT	33414
CPT	33415
CPT	33416
CPT	33425
CPT	33427
CPT	33430
CPT	33463
CPT	33476
CPT	33478
CPT	33474
CPT	33475
CPT	33608
CPT	33611
CPT	33615
CPT	33617
CPT	33606
CPT	33619
CPT	33692
CPT	33694
CPT	33697
CPT	33730
CPT	33732
CPT	33770
CPT	33778
CPT	33780
CPT	33786
CPT	33788
CPT	33641
CPT	33645
CPT	33647
CPT	33660
CPT	33665
CPT	33670
CPT	33681
CPT	33736
CPT	33750
CPT	33767
CPT	33924
CPT	33802
CPT	33803

CPT	33820
CPT	33822
CPT	33840
CPT	33845
CPT	33852
CPT	33853
CPT	33917
CPT	33920
CPT	33690
CPT	33207
CPT	33208
CPT	33212
CPT	33213
CPT	33025
CPT	33530
HCPCS	J1800
HCPCS	S0171
HCPCS	J1205
HCPCS	J1730
HCPCS	J1160
HCPCS	J1162
HCPCS	J1325
HCPCS	K0455
HCPCS	S0155
HCPCS	S9347
HCPCS	J1940
HCPCS	J0360
HCPCS	S0139
HCPCS	J2440
HCPCS	J2670
HCPCS	J3265
HCPCS	J3285
HCPCS	Q2006
Medication Class	Beta blockers
Medication Class	Loop diuretics
Medication Class	K-sparing diuretics
Medication Class	Thiazide diuretics
Medication Class	Diuretic combinations
Medication Class	ACE inhibitors
Medication Class	Angiotensin II receptor antagonists
Medication Class	Antihypertensive combinations
Medication Class	Miscellaneous antihypertensives
Medication Class	Miscellaneous cardiac agents

ICD-9-CM Diagnosis	770.7
Generic Names	Albuterol
Generic Names	Amiloride hydrochloride
Generic Names	Amiloride hydrochloride/hydrochlorothiazide
Generic Names	Aminophylline
Generic Names	Arformoterol tartrate
Generic Names	Atenolol/chlorthalidone
Generic Names	Benazepril hydrochloride/hydrochlorothiazide
Generic Names	Bendroflumethiazide
Generic Names	Bendroflumethiazide/nadolol
Generic Names	Benzthiazide
Generic Names	Bisoprolol fumarate/hydrochlorothiazide
Generic Names	Bitolterol mesylate
Generic Names	Budesonide/formoterol fumarate
Generic Names	Bumetanide
Generic Names	Candesartan cilexetil/hydrochlorothiazide
Generic Names	Captopril/hydrochlorothiazide
Generic Names	Chlorothiazide
Generic Names	Chlorthalidone
Generic Names	Chlorthalidone/clonidine hydrochloride
Generic Names	Dexamethasone
Generic Names	Dyphylline
Generic Names	Enalapril maleate/hydrochlorothiazide
Generic Names	Epinephrine
Generic Names	Eprosartan mesylate/hydrochlorothiazide
Generic Names	Ethacrynic acid
Generic Names	Fluticasone propionate/salmeterol xinafoate
Generic Names	Formoterol fumarate
Generic Names	Fosinopril sodium/hydrochlorothiazide
Generic Names	Furosemide
Generic Names	Hydrochlorothiazide
Generic Names	Hydrochlorothiazide/irbesartan
Generic Names	Hydrochlorothiazide/lisinopril
Generic Names	Hydrochlorothiazide/losartan potassium
Generic Names	Hydrochlorothiazide/metoprolol

	succinate
Generic Names	Hydrochlorothiazide/metoprolol tartrate
Generic Names	Hydrochlorothiazide/moexipril hydrochloride
Generic Names	Hydrochlorothiazide/olmesartan medoxomil
Generic Names	Hydrochlorothiazide/propranolol hydrochloride
Generic Names	Hydrochlorothiazide/quinapril hydrochloride
Generic Names	Hydrochlorothiazide/spironolactone
Generic Names	Hydrochlorothiazide/telmisartan
Generic Names	Hydrochlorothiazide/timolol maleate
Generic Names	Hydrochlorothiazide/triamterene
Generic Names	Hydrochlorothiazide/valsartan
Generic Names	Hydroflumethiazide
Generic Names	Indapamide
Generic Names	Ipratropium bromide
Generic Names	Isoetharine
Generic Names	Isoproterenol
Generic Names	Levalbuterol
Generic Names	Metaproterenol sulfate
Generic Names	Methyclothiazide
Generic Names	Methylprednisolone
Generic Names	Metolazone
Generic Names	Oxtriphylline
Generic Names	Pirbuterol acetate
Generic Names	Polythiazide
Generic Names	Polythiazide/prazosin hydrochloride
Generic Names	Salmeterol xinafoate
Generic Names	Spironolactone
Generic Names	Terbutaline sulfate
Generic Names	Theophylline
Generic Names	Torsemide
Generic Names	Triamterene
Generic Names	Trichlormethiazide
Revenue Codes	0277
Revenue Codes	060x
ICD-9-CM Diagnosis	V46.2x
CPT	4030F
HCPCS	E0424-E0444
HCPCS	E0455

HCPCS	E1353
HCPCS	K0738
HCPCS	E1390
HCPCS	E1391
ICD-9-CM Diagnosis	765.21
ICD-9-CM Diagnosis	765.22
ICD-9-CM Diagnosis	765.23
ICD-9-CM Diagnosis	765.24
ICD-9-CM Diagnosis	765.25
ICD-9-CM Diagnosis	765.26
ICD-9-CM Diagnosis	765.27
ICD-9-CM Diagnosis	765.28
ICD-9-CM Diagnosis	765.29
ICD-9-CM Diagnosis	765.20