



CMS Chronic Condition Data Warehouse Condition Categories

Algorithms	Reference Time Period (# of years)	Valid ICD-9/CPT4/HCPSC Codes ¹	Number/Type of Claims to Qualify ²	Exclusions	Comments
Acute Myocardial Infarction	1 year	DX 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91 (ONLY first or second DX on the claim)	At least 1 inpatient claim with DX codes during the 1-yr period		
Alzheimer's Disease	3 years	DX 331.0 (any DX on the claim)	At least 1 inpatient, SNF, HHA, HOP or Carrier claim with DX codes during the 3-yr period		
Alzheimer's Disease and Related Disorders or Senile Dementia	3 years	DX 331.0, 331.1, 331.11, 331.19, 331.2, 331.7, 290.0, 290.1, 290.10, 290.11, 290.12, 290.13, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 294.0, 294.1, 294.10, 294.11, 294.8, 797 (any DX on the claim)	At least 1 inpatient, SNF, HHA HOP or Carrier claim with DX codes during the 3-yr period		
Atrial Fibrillation	1 year	DX 427.31 (ONLY first or second DX on the claim)	At least 1 inpatient claim or 2 HOP or Carrier claims with DX code during the 1-yr period		Any combination of 2 HOP/Carrier claims at least one day apart.
Cataract	1 year	DX 366.01, 366.02, 366.03, 366.04, 366.09, 366.10, 366.12, 366.13, 366.14, 366.15, 366.16, 366.17, 366.18, 366.19, 366.20, 366.21, 366.22, 366.23, 366.30, 366.32, 366.33, 366.34, 366.41, 366.42, 366.43, 366.44, 366.45, 366.46, 366.50, 366.51, 366.52, 366.53, 366.8, 366.9, 379.26, 379.31, 379.39, 743.31, 743.32, 743.33, 996.53, V431, (ONLY principal DX on the claim)	At least 1 HOP or Carrier claim with DX codes during the 1-yr period		
Chronic Kidney Disease	2 years	DX 016.00, 016.01, 016.02, 016.03, 016.04, 016.05, 016.06, 095.4, 189.0, 189.9, 223.0, 236.91, 249.40, 249.41, 250.40, 250.41, 250.42, 250.43, 271.4, 274.1, 274.10, 283.11, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 440.1, 442.1, 572.4, 580.0, 580.4, 580.81, 580.89, 580.9, 581.0, 581.1, 581.2, 581.3, 581.81, 581.89, 581.9, 582.0, 582.1, 582.2, 582.4, 582.81, 582.89, 582.9, 583.0, 583.1, 583.2, 583.4, 583.6, 583.7, 583.81, 583.89, 583.9, 584.5, 584.6, 584.7, 584.8, 584.9, 585, 585.1, 585.2, 585.3, 585.4, 585.5, 585.6, 585.9, 586, 587, 588.0, 588.1, 588.81, 588.89, 588.9, 591, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19, 753.20, 753.21, 753.22, 753.23, 753.29, 794.4 (any DX on the claim)	At least 1 inpatient, SNF or HHA claim or 2 HOP or Carrier claims with DX codes during the 2-yr period		Any combination of 2 HOP/Carrier claims at least one day apart.



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Chronic Obstructive Pulmonary Disease	1 year	DX 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 494.0, 494.1, 496 (any DX on the claim)	At least 1 inpatient, SNF, HHA or 2 HOP or Carrier claims with DX codes during the 1-yr period		Any combination of 2 HOP/Carrier claims at least one day apart.
Depression	1 year	DX 296.20, 296.21, 296.22, 296.23, 296.24, 296.25, 296.26, 296.30, 296.31, 296.32, 296.33, 296.34, 296.35, 296.36, 296.50, 296.51, 296.52, 296.53, 296.54, 296.55, 296.56, 296.60, 296.61, 296.62, 296.63, 296.64, 296.65, 296.66, 296.89, 298.0, 300.4, 309.1, 311 (any DX on the claim)	At least 1 inpatient, SNF, HHA, HOP or Carrier claim with DX codes during the 1-yr period		
Diabetes	2 years	DX 249.00, 249.01, 249.10, 249.11, 249.20, 249.21, 249.30, 249.31, 249.40, 249.41, 249.50, 249.51, 249.60, 249.61, 249.70, 249.71, 249.80, 249.81, 249.90, 249.91, 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93, 357.2, 362.01, 362.02, 366.41 (any DX on the claim)	At least 1 inpatient, SNF or HHA claim or 2 HOP or Carrier claim with DX codes during the 2-yr period		Any combination of 2 HOP/Carrier claims at least one day apart.
Glaucoma	1 year	DX 364.55, 365.10, 365.11, 365.12, 365.15, 365.89, 365.9, 362.85, 365.00, 365.01, 365.02, 365.03, 365.04, 377.14, 365.20, 365.21, 365.22, 365.23, 365.24, 365.41, 365.61, 366.31, V801 (ONLY principal DX on the claim)	At least 1 Carrier claim with DX codes during the 1-yr period		
Heart Failure	2 years	DX 398.91, 402.01, 402.11, 402.91, 404.01, 404.11, 404.91, 404.03, 404.13, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9 (any DX on the claim)	At least 1 inpatient, HOP or Carrier claim with DX codes during the 2-yr period		
Hip/Pelvic Fracture	1 year	DX 733.98, 808.0, 808.1, 808.2, 808.3, 808.41, 808.42, 808.43, 808.49, 808.51, 808.52, 808.53, 808.59, 808.8, 808.9, 820.00, 820.01, 820.02, 820.03, 820.09, 820.10, 820.11, 820.12, 820.13, 820.19, 820.20, 820.21, 820.22, 820.30, 820.31, 820.32, 820.8, 820.9 (any DX on the claim)	At least 1 inpatient claim with DX code during the 1-yr period		



Algorithms	Reference Time Period (# of years)	Valid ICD-9/CPT4/HCPCS Codes ¹	Number/Type of Claims to Qualify ²	Exclusions	Comments
Ischemic Heart Disease	2 years	<p>DX 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.10, 414.11, 414.12, 414.19, 414.2, 414.3, 414.8, 414.9</p> <p>Proc 00.66, 36.01, 36.02, 36.03, 36.04, 36.05, 36.06, 36.07, 36.09, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 36.2, 36.31, 36.32</p> <p>HCPCS 33510, 33511, 33512, 33513, 33514, 33515, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 33542, 33545, 33548, 92975, 92977, 92980, 92982, 92995, 33140, 33141 (any DX, PROC or HCPCS on the claim)</p>	At least 1 inpatient, SNF, HHA, HOP or Carrier claim with DX, Procedure or HCPCS codes during the 2-yr period		
Osteoporosis	1 year	DX 733.00, 733.01, 733.02, 733.03, 733.09 (any DX on the claim)	At least 1 inpatient, HOP or Carrier claim with DX code during the 1-yr period		
RA/OA (Rheumatoid Arthritis/ Osteoarthritis)	2 years	DX 714.0, 714.1, 714.2, 714.30, 714.31, 714.32, 714.33, 715.00, 715.04, 715.09, 715.10, 715.11, 715.12, 715.13, 715.14, 715.15, 715.16, 715.17, 715.18, 715.20, 715.21, 715.22, 715.23, 715.24, 715.25, 715.26, 715.27, 715.28, 715.30, 715.31, 715.32, 715.33, 715.34, 715.35, 715.36, 715.37, 715.38, 715.80, 715.89, 715.90, 715.98 (any DX on the claim)	At least 2 inpatient, SNF, HHA, HOP or Carrier claims with DX codes during the 2-yr period		Any combination of claims at least one day apart.
Stroke / Transient Ischemic Attack	1 year	DX 430, 431, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 435.0, 435.1, 435.3, 435.8, 435.9, 436, 997.02 (any DX on the claim)	At least 1 inpatient claim or 2 HOP or Carrier claims with DX codes during the 1-yr period	If any of the qualifying claims have: 800 <= DX Code <= 804.9, 850 <= DX Code <= 854.1 in any DX position OR DX V57xx as the principal DX code, then EXCLUDE.	Any combination of 2 HOP/Carrier claims at least one day apart.



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Female Breast Cancer**	1 year	DX 174.0, 174.1, 174.2, 174.3, 174.4, 174.5, 174.6, 174.8, 174.9, 233.0 (any DX on the claim)	At least 1 inpatient or 2 HOP or Carrier claims with DX codes during the 1-year time period		Any combination of 2 HOP/Carrier claims at least one day apart.
Colorectal Cancer	1 year	DX 154.0, 154.1, 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9, 230.3, 230.4 (any DX on the claim)	At least 1 inpatient or 2 HOP or Carrier claims with DX codes during the 1-year time period		Any combination of 2 HOP/Carrier claims at least one day apart.
Prostate Cancer	1 year	DX 185, 233.4 (any DX on the claim)	At least 1 inpatient or 2 HOP or Carrier claims with DX codes during the 1-year time period		Any combination of 2 HOP/Carrier claims at least one day apart.
Lung Cancer	1 year	DX 162.0, 162.2, 162.3, 162.4, 162.5, 162.8, 162.9, 231.2 (any DX on the claim)	At least 1 inpatient or 2 HOP or Carrier claims with DX codes during the 1-year time period		Any combination of 2 HOP/Carrier claims at least one day apart.
Endometrial Cancer	1 year	DX 182.0, 182.1, 182.8, 233.2 (any DX on the claim)	At least 1 inpatient or 2 HOP or Carrier claims with DX codes during the 1-year time period		Any combination of 2 HOP/Carrier claims at least one day apart.

¹ Effective dates of these codes vary. Researchers may be interested in confirming the code(s) of interest in accompanying claims or assessment data files.

² Carrier claims refers to RIC "O" claims (not DMERC RIC "M" claims), and excludes any claims for which line item Berenson-Eggers Type of Service [BETOS] variable equals D1A, D1B, D1C, D1D, D1E, D1F, D1G, or O1A. The categories with D1 in the first two positions are DME categories. The O1A category includes ambulance services. The intent of the algorithm is to exclude claims where the services do not require a licensed health care professional. SNF refers to skilled nursing facility; HHA refers to home health agency; HOP refers to hospital outpatient.

**The diagnosis codes included in this definition are for female breast cancer only (male breast cancer codes are not included). Researchers may be interested in confirming gender with the accompanying beneficiary data file due to the potential miscoding of diagnosis codes.