

Supplementary Table S1. ICD-9 and ICD-10 codes used to define comorbidities

| ICD code | Code Description |
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| Chronic kidney disease - excluding end stage | |
| 250.4 | Diabetes mellitus with renal manifestations type II or unspecified type not stated as uncontrolled |
| 250.40 | Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled |
| 250.41 | Diabetes mellitus with renal manifestations type I not stated as uncontrolled |
| 250.42 | Diabetes mellitus with renal manifestations type II or unspecified type uncontrolled |
| 250.43 | Diabetes mellitus with renal manifestations type I uncontrolled |
| 403 | Malignant hypertensive renal disease without renal failure |
| 403.01 | Malignant hypertensive renal disease with renal failure |
| 403.1 | Benign hypertensive renal disease without renal failure |
| 403.11 | Benign hypertensive renal disease with renal failure |
| 403.9 | Unspecified hypertensive renal disease without renal failure |
| 403.91 | Unspecified hypertensive renal disease with renal failure |
| 404 | Malignant hypertensive heart and renal disease without heart failure or renal failure |
| 404.01 | Malignant hypertensive heart and renal disease with heart failure |
| 404.02 | Malignant hypertensive heart and renal disease with renal failure |
| 404.03 | Malignant hypertensive heart and renal disease with heart failure and renal failure |
| 404.1 | Benign hypertensive heart and renal disease without heart failure or renal failure |
| 404.11 | Benign hypertensive heart and renal disease with heart failure |
| 404.12 | Benign hypertensive heart and renal disease with renal failure |
| 404.13 | Benign hypertensive heart and renal disease with heart failure and renal failure |
| 404.9 | Unspecified hypertensive heart and renal disease without heart failure or renal failure |
| 404.91 | Unspecified hypertensive heart and renal disease with heart failure |
| 404.92 | Unspecified hypertensive heart and renal disease with renal failure |

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| 404.93 | Unspecified hypertensive heart and renal disease with heart failure and renal failure |
| 585.1 | Chronic kidney disease, Stage I |
| 585.2 | Chronic kidney disease, Stage II (mild) |
| 585.3 | Chronic kidney disease, Stage III (moderate) |
| 585.4 | Chronic kidney disease, Stage IV (severe) |
| 585.9 | Chronic kidney disease, unspecified |
| I130 | Hypertensive heart and chronic kidney disease with heart failure, and stage 1 through stage 4 chronic kidney disease |
| I131 | Hypertensive heart and chronic kidney disease without heart failure |
| E0922 | Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease |
| E1022 | Type 1 diabetes mellitus with diabetic chronic kidney disease |
| E1122 | Type 2 diabetes mellitus with diabetic chronic kidney disease |
| E1322 | Other diabetes mellitus with diabetic chronic kidney disease |
| I12 | Hypertensive chronic kidney disease |
| N18 | Chronic kidney disease |
| N181 | Chronic kidney disease, stage 1 |
| N182 | Chronic kidney disease, stage 2 (mild) |
| N183 | Chronic kidney disease, stage 3 (moderate) |
| N184 | Chronic kidney disease, stage 4 (severe) |
| N185 | Chronic kidney disease, stage 5 |
| N186 | End stage renal disease |
| N188 | Other chronic renal failure (WHO) |
| N189 | Chronic kidney disease, unspecified |
| I1310 | Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease |
| E1022 | Type 1 diabetes mellitus with diabetic chronic kidney disease |
| E1122 | Type 2 diabetes mellitus with diabetic chronic kidney disease |

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| E1322 | Other specified diabetes mellitus with diabetic chronic kidney disease |
| End-stage renal disease | |
| 403.01 | Malignant hypertensive renal disease with renal failure |
| 403.11 | Benign hypertensive renal disease with renal failure |
| 403.91 | Unspecified hypertensive renal disease with renal failure |
| 404.02 | Malignant hypertensive heart and renal disease with renal failure |
| 404.03 | Malignant hypertensive heart and renal disease with heart failure and renal failure |
| 404.12 | Benign hypertensive heart and renal disease with renal failure |
| 404.13 | Benign hypertensive heart and renal disease with heart failure and renal failure |
| 404.92 | Unspecified hypertensive heart and renal disease with renal failure |
| 404.93 | Unspecified hypertensive heart and renal disease with heart failure and renal failure |
| 585.5 | Chronic kidney disease, Stage V |
| 585.6 | End stage renal disease |
| I132 | Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease |
| N185 | Chronic kidney disease, stage 5 |
| N186 | End stage renal disease |
| Z490 | Preparatory care for renal dialysis |
| Z492 | Other dialysis (WHO) |
| Z940 | Kidney transplant status |
| Z992 | Dependence on renal dialysis |
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| Hypertension | |
| 403 | Malignant hypertensive renal disease without renal failure |
| 404 | Malignant hypertensive heart and renal disease without heart failure or renal failure |
| I12 | Hypertensive chronic kidney disease |

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| 401 | Essential hypertension |
| 402 | Hypertensive heart disease |
| 405 | Secondary hypertension |
| I10 | Essential primary hypertension |
| I11 | Hypertensive heart disease |
| I13 | Hypertensive heart disease and chronic kidney disease |
| I15 | Secondary hypertension |
| I16 | Hypertensive crisis |
| Diabetes | |
| 250.4 | Diabetes mellitus with renal manifestations type II or unspecified type not stated as uncontrolled |
| 250 | Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled |
| 250.01 | Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled |
| 250.02 | Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled |
| 250.03 | Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled |
| 250.10 | Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled |
| 250.11 | Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled |
| 250.12 | Diabetes with ketoacidosis, type II or unspecified type, uncontrolled |
| 250.13 | Diabetes with ketoacidosis, type I [juvenile type], uncontrolled |
| 250.20 | Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled |
| 250.21 | Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled |
| 250.22 | Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled |
| 250.23 | Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled |
| 250.30 | Diabetes with other coma, type II or unspecified type, not stated as uncontrolled |
| 250.31 | Diabetes with other coma, type I [juvenile type], not stated as uncontrolled |

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| 250.32 | Diabetes with other coma, type II or unspecified type, uncontrolled |
| 250.33 | Diabetes with other coma, type I [juvenile type], uncontrolled |
| 250.40 | Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled |
| 250.41 | Diabetes mellitus with renal manifestations type I not stated as uncontrolled |
| 250.42 | Diabetes mellitus with renal manifestations type II or unspecified type uncontrolled |
| 250.43 | Diabetes mellitus with renal manifestations type I uncontrolled |
| 250.50 | Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled |
| 25051 | Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled |
| 250.52 | Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled |
| 250.53 | Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled |
| 250.60 | Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled |
| 250.61 | Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled |
| 250.62 | Diabetes with neurological manifestations, type II or unspecified type, uncontrolled |
| 250.63 | Diabetes with neurological manifestations, type I [juvenile type], uncontrolled |
| 250.70 | Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled |
| 250.71 | Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled |
| 250.72 | Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled |
| 250.73 | Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled |
| 250.80 | Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled |
| 250.81 | Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled |
| 250.82 | Diabetes with other specified manifestations, type II or unspecified type, uncontrolled |
| 250.83 | Diabetes with other specified manifestations, type I [juvenile type], uncontrolled |
| 250.90 | Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled |
| 250.91 | Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled |
| 250.92 | Diabetes with unspecified complication, type II or unspecified type, uncontrolled |

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| 250.93 | Diabetes with unspecified complication, type I [juvenile type], uncontrolled |
| E102 | Type 1 diabetes mellitus with diabetic nephropathy , diabetic chronic kidney disease, or other diabetic kidney complication |
| E112 | Type 2 diabetes mellitus with diabetic nephropathy, diabetic chronic kidney disease, or other diabetic kidney complication |
| E132 | Other specified diabetes mellitus with diabetic nephropathy, diabetic chronic kidney disease, or other diabetic kidney complication |
| E1022 | Type 1 diabetes mellitus with diabetic chronic kidney disease |
| E1122 | Type 2 diabetes mellitus with diabetic chronic kidney disease |
| E1322 | Other diabetes mellitus with diabetic chronic kidney disease |
| E1010 | Type 1 diabetes mellitus with ketoacidosis without coma |
| E1011 | Type 1 diabetes mellitus with ketoacidosis with coma |
| E1021 | Type 1 diabetes mellitus with diabetic nephropathy |
| E1022 | Type 1 diabetes mellitus with diabetic chronic kidney disease |
| E1029 | Type 1 diabetes mellitus with other diabetic kidney complication |
| E10311 | Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema |
| E10319 | Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema |
| E103211 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye |
| E103212 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye |
| E103213 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral |
| E103219 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E103291 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye |
| E103292 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye |
| E103293 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral |
| E103299 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E103311 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye |
| E103312 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye |
| E103313 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral |

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| E103319 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E103391 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye |
| E103392 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye |
| E103393 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral |
| E103399 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E103411 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye |
| E103412 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye |
| E103413 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral |
| E103419 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E103491 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye |
| E103492 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye |
| E103493 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral |
| E103499 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E103511 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye |
| E103512 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye |
| E103513 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral |
| E103519 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye |
| E103521 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye |
| E103522 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye |
| E103523 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral |
| E103529 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye |
| E103531 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye |
| E103532 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye |
| E103533 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral |
| E103539 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye |

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| E103541 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye |
| E103542 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye |
| E103543 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral |
| E103549 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye |
| E103551 | Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye |
| E103552 | Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye |
| E103553 | Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral |
| E103559 | Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye |
| E103591 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye |
| E103592 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye |
| E103593 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral |
| E103599 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye |
| E1036 | Type 1 diabetes mellitus with diabetic cataract |
| E1037X1 | Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye |
| E1037X2 | Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye |
| E1037X3 | Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral |
| E1037X9 | Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye |
| E1039 | Type 1 diabetes mellitus with other diabetic ophthalmic complication |
| E1040 | Type 1 diabetes mellitus with diabetic neuropathy, unspecified |
| E1041 | Type 1 diabetes mellitus with diabetic mononeuropathy |
| E1042 | Type 1 diabetes mellitus with diabetic polyneuropathy |
| E1043 | Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy |
| E1044 | Type 1 diabetes mellitus with diabetic amyotrophy |

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| E1049 | Type 1 diabetes mellitus with other diabetic neurological complication |
| E1051 | Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene |
| E1052 | Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene |
| E1059 | Type 1 diabetes mellitus with other circulatory complications |
| E10610 | Type 1 diabetes mellitus with diabetic neuropathic arthropathy |
| E10618 | Type 1 diabetes mellitus with other diabetic arthropathy |
| E10620 | Type 1 diabetes mellitus with diabetic dermatitis |
| E10621 | Type 1 diabetes mellitus with foot ulcer |
| E10622 | Type 1 diabetes mellitus with other skin ulcer |
| E10628 | Type 1 diabetes mellitus with other skin complications |
| E10630 | Type 1 diabetes mellitus with periodontal disease |
| E10638 | Type 1 diabetes mellitus with other oral complications |
| E10641 | Type 1 diabetes mellitus with hypoglycemia with coma |
| E10649 | Type 1 diabetes mellitus with hypoglycemia without coma |
| E1065 | Type 1 diabetes mellitus with hyperglycemia |
| E1069 | Type 1 diabetes mellitus with other specified complication |
| E108 | Type 1 diabetes mellitus with unspecified complications |
| E109 | Type 1 diabetes mellitus without complications |
| E1100 | Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC) |
| E1101 | Type 2 diabetes mellitus with hyperosmolarity with coma |
| E1110 | Type 2 diabetes mellitus with ketoacidosis without coma |
| E1111 | Type 2 diabetes mellitus with ketoacidosis with coma |
| E1121 | Type 2 diabetes mellitus with diabetic nephropathy |
| E1122 | Type 2 diabetes mellitus with diabetic chronic kidney disease |
| E1129 | Type 2 diabetes mellitus with other diabetic kidney complication |

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| E11311 | Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema |
| E11319 | Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema |
| E113211 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye |
| E113212 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye |
| E113213 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral |
| E113219 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E113291 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye |
| E113292 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye |
| E113293 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral |
| E113299 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E113311 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye |
| E113312 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye |
| E113313 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral |
| E113319 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E113391 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye |
| E113392 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye |
| E113393 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral |
| E113399 | Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E113411 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye |
| E113412 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye |
| E113413 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral |
| E113419 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E113491 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye |
| E113492 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye |
| E113493 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral |

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| E113499 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E113511 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye |
| E113512 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye |
| E113513 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral |
| E113519 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye |
| E113521 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye |
| E113522 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye |
| E113523 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral |
| E113529 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye |
| E113531 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye |
| E113532 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye |
| E113533 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral |
| E113539 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye |
| E113541 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye |
| E113542 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye |
| E113543 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral |
| E113549 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye |
| E113551 | Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye |
| E113552 | Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye |
| E113553 | Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral |
| E113559 | Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye |
| E113591 | Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye |
| E113592 | Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye |

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| E113593 | Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral |
| E113599 | Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye |
| E1136 | Type 2 diabetes mellitus with diabetic cataract |
| E1137X1 | Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye |
| E1137X2 | Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye |
| E1137X3 | Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral |
| E1137X9 | Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye |
| E1139 | Type 2 diabetes mellitus with other diabetic ophthalmic complication |
| E1140 | Type 2 diabetes mellitus with diabetic neuropathy, unspecified |
| E1141 | Type 2 diabetes mellitus with diabetic mononeuropathy |
| E1142 | Type 2 diabetes mellitus with diabetic polyneuropathy |
| E1143 | Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy |
| E1144 | Type 2 diabetes mellitus with diabetic amyotrophy |
| E1149 | Type 2 diabetes mellitus with other diabetic neurological complication |
| E1151 | Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene |
| E1152 | Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene |
| E1159 | Type 2 diabetes mellitus with other circulatory complications |
| E11610 | Type 2 diabetes mellitus with diabetic neuropathic arthropathy |
| E11618 | Type 2 diabetes mellitus with other diabetic arthropathy |
| E11620 | Type 2 diabetes mellitus with diabetic dermatitis |
| E11621 | Type 2 diabetes mellitus with foot ulcer |
| E11622 | Type 2 diabetes mellitus with other skin ulcer |
| E11628 | Type 2 diabetes mellitus with other skin complications |
| E11630 | Type 2 diabetes mellitus with periodontal disease |
| E11638 | Type 2 diabetes mellitus with other oral complications |

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| E11641 | Type 2 diabetes mellitus with hypoglycemia with coma |
| E11649 | Type 2 diabetes mellitus with hypoglycemia without coma |
| E1165 | Type 2 diabetes mellitus with hyperglycemia |
| E1169 | Type 2 diabetes mellitus with other specified complication |
| E118 | Type 2 diabetes mellitus with unspecified complications |
| E119 | Type 2 diabetes mellitus without complications |
| E1300 | Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC) |
| E1301 | Other specified diabetes mellitus with hyperosmolarity with coma |
| E1310 | Other specified diabetes mellitus with ketoacidosis without coma |
| E1311 | Other specified diabetes mellitus with ketoacidosis with coma |
| E1321 | Other specified diabetes mellitus with diabetic nephropathy |
| E1322 | Other specified diabetes mellitus with diabetic chronic kidney disease |
| E1329 | Other specified diabetes mellitus with other diabetic kidney complication |
| E13311 | Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema |
| E13319 | Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema |
| E133211 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye |
| E133212 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye |
| E133213 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral |
| E133219 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E133291 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye |
| E133292 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye |
| E133293 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral |
| E133299 | Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E133311 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye |
| E133312 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye |

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| E133313 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral |
| E133319 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E133391 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye |
| E133392 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye |
| E133393 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral |
| E133399 | Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E133411 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye |
| E133412 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye |
| E133413 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral |
| E133419 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E133491 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye |
| E133492 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye |
| E133493 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral |
| E133499 | Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E133511 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye |
| E133512 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye |
| E133513 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral |
| E133519 | Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye |
| E133521 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye |
| E133522 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye |
| E133523 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral |
| E133529 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye |
| E133531 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye |
| E133532 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye |
| E133533 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral |

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| E133539 | Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye |
| E133541 | Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye |
| E133542 | Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye |
| E133543 | Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral |
| E133549 | Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye |
| E133551 | Other specified diabetes mellitus with stable proliferative diabetic retinopathy, right eye |
| E133552 | Other specified diabetes mellitus with stable proliferative diabetic retinopathy, left eye |
| E133553 | Other specified diabetes mellitus with stable proliferative diabetic retinopathy, bilateral |
| E133559 | Other specified diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye |
| E133591 | Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye |
| E133592 | Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye |
| E133593 | Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral |
| E133599 | Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye |
| E1336 | Other specified diabetes mellitus with diabetic cataract |
| E1337X1 | Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, right eye |
| E1337X2 | Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, left eye |
| E1337X3 | Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral |
| E1337X9 | Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye |
| E1339 | Other specified diabetes mellitus with other diabetic ophthalmic complication |
| E1340 | Other specified diabetes mellitus with diabetic neuropathy, unspecified |
| E1341 | Other specified diabetes mellitus with diabetic mononeuropathy |
| E1342 | Other specified diabetes mellitus with diabetic polyneuropathy |
| E1343 | Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy |

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| E1344 | Other specified diabetes mellitus with diabetic amyotrophy |
| E1349 | Other specified diabetes mellitus with other diabetic neurological complication |
| E1351 | Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene |
| E1352 | Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene |
| E1359 | Other specified diabetes mellitus with other circulatory complications |
| E13610 | Other specified diabetes mellitus with diabetic neuropathic arthropathy |
| E13618 | Other specified diabetes mellitus with other diabetic arthropathy |
| E13620 | Other specified diabetes mellitus with diabetic dermatitis |
| E13621 | Other specified diabetes mellitus with foot ulcer |
| E13622 | Other specified diabetes mellitus with other skin ulcer |
| E13628 | Other specified diabetes mellitus with other skin complications |
| E13630 | Other specified diabetes mellitus with periodontal disease |
| E13638 | Other specified diabetes mellitus with other oral complications |
| E13641 | Other specified diabetes mellitus with hypoglycemia with coma |
| E13649 | Other specified diabetes mellitus with hypoglycemia without coma |
| E1365 | Other specified diabetes mellitus with hyperglycemia |
| E1369 | Other specified diabetes mellitus with other specified complication |
| E138 | Other specified diabetes mellitus with unspecified complications |
| E139 | Other specified diabetes mellitus without complications |