

TABLE E-1 ICD-10 and OPCS-4 Codes Used in the Analysis*

| | Codes |
|--------------------------------|--|
| Index procedure | |
| Primary hip arthroplasty | W37.1, W38.1, W39.1, W93.1, W58.1, W94.1, W95.1 |
| Primary knee arthroplasty | W40.1, W41.1, W42.1 |
| Complication | |
| Wound complication | |
| Reoperation for deep infection | W80.1-3, W80.8-9, W85.2, W87 W39.4 in combination with Y221 W42.4 in combination with Y221 |
| Any wound complication | Above reoperation codes Y221, W90.1 T810, T814, T846-7 T857-8 in combination with Y831 |
| Readmission to orthopaedics | |
| Major bleeding | |
| Hemorrhagic stroke | I61, I62 |
| Gastrointestinal Hemorrhage | G35, G45.1, .8-9, G55, K250, K252, K260, K262, K270, K272, K290, K920, K921, K922 |
| Venous thromboembolism | |
| Pulmonary embolus | I26 |
| Phlebitis and thrombophlebitis | I80.1-3, I80.8-9 |
| In-hospital mortality | |

*ICD-10 = International Statistical Classification of Diseases and Related Health Problems (10th revision), and OPCS-4 = Office of Population Censuses and Surveys Classification of Surgical Operations and Procedures (4th revision).

TABLE E-2 Charlson Comorbidity Index*

| Condition | ICD-10 Diagnosis Codes | Score |
|--------------------------------|---|-------|
| Acute myocardial infarction | I21, I22, I252 | 1 |
| Congestive cardiac failure | I43, I50, I099, I110, I130, I132, I255, I420, I425, I426, I427, I428, I429, P290 | 1 |
| Peripheral vascular disease | I70, I71, I731, I738, I739, I771, I790, I792, K551, K558, K559, Z958, Z959 | 1 |
| Cerebral vascular disease | G45, G46, I60, I61, I62, I63, I64, I65, I66, I67, I68, I69, H340 | 1 |
| Dementia | F00, F01, F02, F03, G30, F051, G311 | 1 |
| Pulmonary disease | J40, J41, J42, J43, J44, J45, J46, J47, J60, J61, J62, J63, J64, J65, J66, J67, I278, I279, J684, J701, J703 | 1 |
| Connective tissue disease | M05, M32, M33, M34, M06, M315, M351, M353, M360 | 1 |
| Peptic ulcer disease | K25, K26, K27, K28 | 1 |
| Liver disease | B18, K73, K74, K700, K701, K702, K703, K709, K717, K713, K714, K715, K760, K762, K763, K764, K768, K769, Z944 | 1 |
| Diabetes without complications | E100, E101, E106, E108, E109, E110, E111, E116, E118, E119, E120, E121, E126, E128, E129, E130, E131, E136, E138, E139, E140, E141, E146, E148, E149 | 1 |
| Diabetes with complications | E102, E103, E104, E105, E107, E112, E113, E114, E115, E117, E122, E123, E124, E125, E127, E132, E133, E134, E135, E137, E142, E143, E144, E145, E147 | 2 |
| Hemiplegia and paraplegia | G81, G82, G041, G114, G801, G802, G830, G831, G832, G833, G834, G839 | 2 |
| Renal disease | N18, N19, N052, N053, N054, N055, N056, N057, N250, I120, I131, N032, N033, N034, N035, N036, N037, Z490, Z491, Z492, Z940, Z992 | 2 |
| Cancer | C0, C1, C2, C3, C40, C41, C43, C45, C46, C47, C48, C49, C5, C6, C70, C71, C72, C73, C74, C75, C76, C81, C82, C83, C84, C85, C883, C887, C889, C900, C901, C91, C92, C93, C940, C941, C942, C943, C945, C947, C95, C96 | 2 |
| Metastatic disease | C77, C78, C79, C80 | 3 |
| Severe liver disease | K704, K711, K721, K729, K765, K766, K767, I850, I859, I864, I982 | 3 |
| Human immunodeficiency virus | B20, B21, B22, B23, B24 | 6 |

*ICD-10 = International Statistical Classification of Diseases and Related Health Problems (10th revision). Each condition is assigned a score of 1, 2, 3, or 6 depending on the risk of dying associated with this condition. The combined total score is used to predict patient-specific overall mortality.