## Appendix A

## ICD-10 Codes Partitioned into a Smaller Set of Combined Pathology Groupings

\*---> CREATE RECODE VARIABLES FOR UCOD - UNDERLYING CAUSE OF DEATH <------;

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IF (UCOD >= 'A00' AND UCOD < 'C00') THEN CAUSE = 'IPDZ';
                                                                   infectious & parasitic diseases
IF (UCOD >= 'COO' AND UCOD < 'C3O') THEN CAUSE = 'MALI';
                                                                   malignant alimentary cancers
IF (UCOD >= 'C30' AND UCOD < 'C40') THEN CAUSE = 'MRSP';
                                                                   mal, respiratory cancers
IF (UCOD >= 'C40' AND UCOD < 'C43') THEN CAUSE = 'MBON';
                                                                   mal, bone cancers
IF (UCOD >= 'C43' AND UCOD < 'C45') THEN CAUSE = 'MSKN';
                                                                   mal. skin cancers
IF (UCOD >= 'C45' AND UCOD < 'C50') THEN CAUSE = 'MCON';
                                                                   mal. connective & soft tissues
IF (UCOD >= 'C50' AND UCOD < 'C69') THEN CAUSE = 'MGNU';
                                                                   mal. gynecological & urinary
IF (UCOD >= 'C69' AND UCOD < 'C73') THEN CAUSE = 'MCNS';
                                                                   mal. CNS cancers
IF (UCOD >= 'C73' AND UCOD < 'C76') THEN CAUSE = 'MEND';
                                                                   mal. endocrine cancers
IF (UCOD >= 'C76' AND UCOD < 'C81') THEN CAUSE = 'TRST';
                                                                   misc cancers
                                                                   mal. lymph & hematopoietic
IF (UCOD >= 'C81' AND UCOD < 'C97') THEN CAUSE = 'MLHT';
IF (UCOD >= 'C97' AND UCOD < 'D10') THEN CAUSE = 'TRST';
                                                                   misc. cancers
IF (UCOD >= 'D10' AND UCOD < 'D37') THEN CAUSE = 'BNGN';
                                                                   benign tumors
IF (UCOD >= 'D37' AND UCOD < 'D50') THEN CAUSE = 'TRST';
                                                                   misc cancers
                                                                   blood & blood-forming organ
IF (UCOD >= 'D50' AND UCOD < 'E00') THEN CAUSE = 'BLOD';
IF (UCOD >= 'E00' AND UCOD < 'E40') THEN CAUSE = 'ENDO';
                                                                   endocrine disease
IF (UCOD >= 'E40' AND UCOD < 'E70') THEN CAUSE = 'NUTR';
                                                                   nutrition related diseases
                                                                   metabolic diseases
IF (UCOD >= 'E70' AND UCOD < 'F00') THEN CAUSE = 'META';</pre>
IF (UCOD >= 'F00' AND UCOD < 'G00') THEN CAUSE = 'MNTL';
                                                                   mental diseases
                                                                   infectious/inflamatory CNS
IF (UCOD >= 'G00' AND UCOD < 'G10') THEN CAUSE = 'NINF';
                                                                   classic CNS diseases
IF (UCOD >= 'G10' AND UCOD < 'G40') THEN CAUSE = 'NCNS';</pre>
IF (UCOD >= 'G40' AND UCOD < 'H00') THEN CAUSE = 'NRST';
                                                                   other CNS
                                                                   eye, ear, mastoid
IF (UCOD >= 'HOO' AND UCOD < '100') THEN CAUSE = 'REST';
IF (UCOD >= '100' AND UCOD < '110') THEN CAUSE = 'IPDZ';
                                                                   infectious & parasitic
                                                                   hypo or hypertension
IF (UCOD >= 'I10' AND UCOD < 'I20') THEN CAUSE = 'HPHO';
IF (UCOD >= '120' AND UCOD < '160') THEN CAUSE = 'HRTD';
                                                                   heart disease
IF (UCOD >= '160' AND UCOD < '170') THEN CAUSE = 'CBVD';
                                                                   cerebrovascular disease
                                                                   circulatory diseases
IF (UCOD >= 'I70' AND UCOD < 'I95') THEN CAUSE = 'CIRC';
                                                                   hypo or hypertension
IF (UCOD >= '195' AND UCOD < '197') THEN CAUSE = 'HPHO';</pre>
                                                                   circulatory diseases
IF (UCOD >= '197' AND UCOD < 'JOO') THEN CAUSE = 'CIRC';
                                                                   pulm - infectious or allergy
IF (UCOD >= 'J00' AND UCOD < 'J40') THEN CAUSE = 'PIAD';</pre>
                                                                   chronic lung disease
IF (UCOD >= 'J40' AND UCOD < 'J60') THEN CAUSE = 'PCLD';</pre>
IF (UCOD >= 'J60' AND UCOD < 'J80') THEN CAUSE = 'PEXT';
                                                                   pulm disease ext cause
IF (UCOD >= 'J80' AND UCOD < 'K00') THEN CAUSE = 'POTH';
                                                                   pulmonary other
                                                                   digestive disease
IF (UCOD >= 'K00' AND UCOD < 'L00') THEN CAUSE = 'DIGD';</pre>
                                                                   skin disease
IF (UCOD >= 'LOO' AND UCOD < 'MOO') THEN CAUSE = 'SKIN';</pre>
                                                                   musculoskeletal disease
IF (UCOD >= 'M00' AND UCOD < 'N00') THEN CAUSE = 'MUSK';</pre>
                                                                   gynecological/urinary
IF (UCOD >= 'N00' AND UCOD < 'O00') THEN CAUSE = 'GNUR';
                                                                   childbirth/perinatal
IF (UCOD >= '000' AND UCOD < 'Q00') THEN CAUSE = 'CBPN';</pre>
IF (UCOD >= 'Q00' AND UCOD < 'R00") THEN CAUSE = 'CGEN';
                                                                   congenital
IF (UCOD >= 'R00' AND UCOD < 'S00') THEN CAUSE = 'REST';
                                                                   other misc.
                                                                   external non-infectious
IF (UCOD >= 'S00' AND UCOD < 'Z00') THEN CAUSE = 'EXTL';
IF (UCOD >= 'Z00' AND UCOD <= 'U99') THEN CAUSE = 'REST';
                                                                   other misc.
```

These result in 36 causes of death that capture every ICD-10 code.

A00-A79 Bacteria, Intestional, STD JA80-B34 Viral Inf. B35-B89 Inf.: Fungi, protozans, worms B90-B99 Sequelae/other Appendix A

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```
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IF (UCOD >= 'C76' AND UCOD < 'C81') THEN CAUSE = 'TRST';
                                                                  misc cancers
                                                                  mal. lymph & hematopoietic
IF (UCOD >= 'C81' AND UCOD < 'C97') THEN CAUSE = 'MLHT';</pre>
IF (UCOD >= 'C97' AND UCOD < 'D10') THEN CAUSE = 'TRST'; •
                                                                  misc. cancers
IF (UCOD >= 'D10' AND UCOD < 'D37') THEN CAUSE = 'BNGN';
                                                                  benign tumors
IF (UCOD >= 'D37' AND UCOD < 'D50') THEN CAUSE = 'TRST'; @
                                                                  misc cancers
IF (UCOD >= 'D50' AND UCOD < 'E00') THEN CAUSE = 'BLOD';
                                                                  blood & blood-forming organ
IF (UCOD >= 'E00' AND UCOD < 'E40') THEN CAUSE = 'ENDO';
                                                                  endocrine disease
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IF (UCOD >= 'G40' AND UCOD < 'H00') THEN CAUSE = 'NRST';
                                                                  other CNS
                                                                  eye, ear, mastoid
IF (UCOD >= 'H00' AND UCOD < '100') THEN CAUSE = 'REST';
IF (UCOD >= '100' AND UCOD < '110') THEN CAUSE = 'IPDZ'; @
                                                                  infectious & parasitic
                                                                  hypo or hypertension
IF (UCOD >= 'I10' AND UCOD < 'I20') THEN CAUSE = 'HPHO';
IF (UCOD >= '120' AND UCOD < '160') THEN CAUSE = 'HRTD';
                                                                  heart disease
IF (UCOD >= '160' AND UCOD < '170') THEN CAUSE = 'CBVD';
                                                                  cerebrovascular disease
                                                                  circulatory diseases
IF (UCOD >= '170' AND UCOD < '195') THEN CAUSE = 'CIRC';
                                                                  hypo or hypertension
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                                                                  circulatory diseases
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                                                                  pulm - infectious or allergy
                                                                  chronic lung disease
IF (UCOD >= 'J40' AND UCOD < 'J60') THEN CAUSE = 'PCLD';
IF (UCOD >= 'J60' AND UCOD < 'J80') THEN CAUSE = 'PEXT';
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IF (UCOD >= 'Z00' AND UCOD <= 'U99') THEN CAUSE = 'REST'; 6
                                                                  other misc.
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These result in 36 causes of death that capture every ICD-10 code.