

## Supplementary file 2. ICPC codes and description of codes for the disease count

### Codes to measure the disease count

The combination of the following 92 ICPC-2 codes were used to measure the disease count. If codes are not mutually exclusive (e.g. T89 and T90), then they count for one.

| ICPC code | Description                        |
|-----------|------------------------------------|
| A79       | Malignancy NOS                     |
| A90       | Congenital anomaly OS/multiple     |
| B72       | Hodgkin's disease/lymphoma         |
| B73       | Leukaemia                          |
| B74       | Malignant neoplasm blood other     |
| B78       | Hereditary haemolytic anaemia      |
| B83       | Purpura/coagulation defect         |
| B90       | HIV-infection/aids                 |
| D74       | Malignant neoplasm stomach         |
| D75       | Malignant neoplasm colon/rectum    |
| D76       | Malignant neoplasm pancreas        |
| D77       | Malig. neoplasm digest other/NOS   |
| F83       | Retinopathy                        |
| F84       | Macular degeneration               |
| F94       | Blindness                          |
| H83       | Otosclerosis                       |
| H84       | Presbycusis                        |
| H86       | Deafness                           |
| K74       | Ischaemic heart disease w. angina  |
| K75       | Acute myocardial infarction        |
| K76       | Ischaemic heart disease w/o angina |
| K77       | Heart failure                      |
| K82       | Pulmonary heart disease            |
| K86       | Hypertension uncomplicated         |
| K87       | Hypertension complicated           |
| K90       | Stroke/cerebrovascular accident    |
| K91       | Cerebrovascular disease            |
| K92       | Atherosclerosis/PVD                |
| K93       | Pulmonary embolism                 |
| K94       | Phlebitis/thrombophlebitis         |
| L84       | Back syndrome w/o radiating pain   |
| L85       | Acquired deformity of spine        |
| L88       | Reumatoïde arthritis               |
| L89       | Osteoarthritis of hip              |
| L90       | Osteoarthritis of knee             |
| L91       | Osteoarthritis other               |
| L95       | Osteoporosis                       |
| L98       | Acquired deformity of limb         |
| N70       | Poliomyelitis                      |
| N74       | Malignant neoplasm nervous system  |
| N85       | Congenital anomaly neurological    |

|     |                                       |
|-----|---------------------------------------|
| N86 | Multiple sclerosis                    |
| N87 | Parkinsonism                          |
| N88 | Epilepsy                              |
| N89 | Migraine                              |
| N90 | Cluster headache                      |
| N92 | Trigeminal neuralgia                  |
| P15 | Substance abuse: chronic alcohol      |
| P28 | Limited function/disability (p)       |
| P70 | Dementia                              |
| P71 | Organic psychosis other               |
| P72 | Schizophrenia                         |
| P73 | Affective psychosis                   |
| P74 | Anxiety disorder/anxiety state        |
| P75 | Somatization disorder                 |
| P76 | Depressive disorder                   |
| P77 | Suicide/suicide attempt               |
| P79 | Phobia/compulsive disorder            |
| P80 | Personality disorder                  |
| P85 | Mental retardation                    |
| P98 | Psychosis NOS/other                   |
| R79 | Chronic bronchitis                    |
| R84 | Malignant neoplasm bronchus/lung      |
| R85 | Malignant neoplasm respiratory, other |
| R95 | Chronic obstructive pulmonary disease |
| R96 | Asthma                                |
| S77 | Malignant neoplasm of skin            |
| S87 | Dermatitis/atopic eczema              |
| S91 | Psoriasis                             |
| S97 | Chronic ulcer skin                    |
| T71 | Malignant neoplasm thyroid            |
| T80 | Congenital anom endocrine/metab.      |
| T85 | Hyperthyroidism/thyrotoxicosis        |
| T86 | Hypothyroidism/myxoedema              |
| T89 | Diabetes insulin dependent            |
| T90 | Diabetes non-insulin dependent        |
| T92 | Gout                                  |
| T93 | Lipid disorder                        |
| T99 | Endocrine/metab/nutrit. dis. other    |
| U04 | Incontinence urine                    |
| U75 | Malignant neoplasm of kidney          |
| U76 | Malignant neoplasm of bladder         |
| U77 | Malignant neoplasm urinary other      |
| U85 | Congenital anomaly urinary tract      |
| U88 | Glomerulonephritis/nephrosis          |
| W72 | Malignant neoplasm relate to preg.    |
| X75 | Malignant neoplasm cervix             |
| X76 | Malignant neoplasm breast female      |
| X77 | Malignant neoplasm genital other (f)  |
| Y77 | Malignant neoplasm prostate           |
| Y78 | Malign neoplasm male genital other    |
| Y85 | Benign prostatic hypertrophy          |

### Other ICPC codes used in this manuscript

| ICPC code | description   |
|-----------|---|
| P17       | Substance abuse: tobacco                                |
| P19       | Substance abuse: drug abuse                             |
| L89       | Osteoarthritis of the hip                               |
| L90       | Osteoarthritis of the knee                              |
| L91       | Osteoarthritis of other locations (other than knee/hip) |

### ICPC codes used with Intego software to define multimorbidity

#### Definition of cancer

Intego uses a set of 22 ICPC-2 codes to define cancer as a multimorbidity: A79, B73, B72, B74, D74, D75, D76, D77, L71, N74, R84, R85, T71, U75, U76, U77, W72, X75, X76, X77, Y77, and Y78.

#### Definition of substance abuse

Intego uses a combination of three ICPC-2 codes to define substance abuse: P15, P17, and P19.