

**Appendix 1. Potential predictors of death investigated in this study (near end-of-life indicators)**

Predictor investigated (time limitation)	Definitions
<b>Demographic variables</b>	
Age continuous	Age of patient in 2017
Sex	Sex of patient
Residential aged care	Mention in a patient record indicating patient is a resident or is applying for residency at a hostel or nursing home (includes terms such as residential care, hostel, residential aged care facility [RACF], nursing home or aged care facility [ACF]). Includes mention of a patient assessed as needing residential care, a health professional visit or review of a patient at an ACF or patient being admitted to residential care or general practice services provided in RACFs including nursing home assessment (CMA 712), contribution to an RACF care plan (MBS ITEM 731), medication review (MBS ITEM 903)
Department of Veterans' Affairs (DVA)	Patient recorded as having a Department of Veterans' Affairs concession card
Health Care Card	Patient recorded as having a health concession card (excludes Department of Veteran Affairs concession cards)
SEIFA disadvantage	Ranking of disadvantage assigned according to patient postcode based on the Index of Relative Socio-Economic Disadvantage (IRSD) developed by the Australian Bureau of Statistics
<b>Condition variables</b>	
Advanced malignancy (ever mentioned)	Mention of malignancy or cancer with advanced, invasive, invading, malignant, metastatic, relapse, recurrence, high grade or stage, end-stage, late-stage, palliative, grade or stage 3-5, secondary or terminal
Anaemia (previous 12 months)	Mention of anaemia
Antipsychotic prescribed (previous 12 months)	Prescription recorded for any medicine classified as an antipsychotic
AF (ever) or anticoagulant prescribed (previous 12 months)	Mention of: atrial fibrillation, atrial flutter, AF/AFIB, atrial tachycardia, paroxysmal AF or prescription for dabigatran, rivaroxaban, apixaban or warfarin
CKD - moderate or severe or proteinuria (ever mentioned) or test results suggestive of CKD (previous 12 months)	Mention of CKD with stage, level, grade, or type 4 or 5; severe chronic renal disease, stages 4-5 renal disease or proteinuria or albuminuria; or eGFR test result in past 12 months of eGFR <29 mL/min/1.73m <sup>2</sup> ; or urine albumin/protein or microalbumin test or albumin-to-creatinine ratio test indicative of proteinuria in last 12 months
Cognitive impairment including dementia and intellectual handicap (ever mentioned)	Mention of: any cognitive or mental problems, impairment, disturbance, decline, abnormality or deterioration; any dementia-related terms: dementia, demented, senility, senile, Alzheimer's, disturbance in mentation, Binswanger, BPSD, Korsakoff, ADRD, ARCD, DLB, MCI or PDD; or mention of MMSE score <23; or mention of intellectual disability, handicap, retardation, delay, disorder, impairment, syndrome
COPD (ever mentioned)	Mention of COPD, COAD, CAL, emphysema, chronic bronchitis
Depression (previous 12 months)	Mention of depression, MDD, MADD, melancholia or suicidal ideation or attempt
Diabetes (ever mentioned)	Mention of diabetes, IDDM, NIDDM, type 1 or type 2 diabetes
Fall or fracture (previous six months)	Mention of a fall or bone fracture
Frailty	Mention of frail or sarcopenia or cachexia or mention of any three of the following: <ul style="list-style-type: none"> <li>• nutritional vulnerability (see definition below)</li> <li>• debility or fatigue or tiredness and weakness</li> <li>• muscle wasting or atrophy</li> <li>• mobility issues or gait disorder</li> </ul>

**Appendix 1. Potential predictors of death investigated in this study (near end-of-life indicators) (cont'd)**

Predictor investigated (time limitation)	Definitions
Heart failure (ever mentioned)	Mention of heart failure (HF), CHF, LVF or RVF
Liver disease (ever mentioned)	Mention of liver/hepatic with advanced disease, alcoholic liver disease, auto-immune, coma, fibrosis, failure, fatty, infarct, inflammation, necrosis, occlusion, peliosis, sclerosis, steato, syndrome, or chronic hepatitis, portal hypertension, cholan* and (sclerosis or biliary), NASH, NAFLD, Wilson's or copper storage disease
Myocardial infarction (ever mentioned)	Mention of myocardial infarct (MI), STEMI or heart attack
Nutritional vulnerability (previous 12 months)	Mention of appetite loss (including poor or reduced appetite or loss of appetite or anorexia), malnutrition (including emaciation, marasmic look, undernourished); supplementary feeding (including enteral feeding, nutritional supplements (eg Sustagen, Fortisip, TwoCal, Ensure); feeding methods such as feeding tubes (eg nasogastric, PEG) or weight loss (including low weight, underweight)
Pneumonia (previous six months)	Mention of pneumonia
Stroke (ever mentioned)	Mention of stroke, CVA
Ulcer – decubitus or wound (previous 12 months)	Mention of decubitus ulcer; bedsore; pressure area; arterial, diabetic, ischaemic, neuropathic, stasis, varicose or venous ulcer; ulcer on ankle, calf, foot heel, malleolus, leg, sacral, skin, or toe; wound management, care or dressing

**Health service variables**

Hospitalisation attendance (previous 12 months)	Mention of admit, admission or discharge, which appears to be related to a hospital; mention of HOSP, which appears to relate to a recent or current hospitalisation or patient sent to hospital or emergency department, a post-hospital visit, actions that were carried out in hospital or actions related to communication with the hospital (eg discharge summary)
ICU admission (previous 12 months)	Mention of intensive care admission or ICU
Polypharmacy (current)	Patient prescribed $\geq 7$ current medicines dispensed through the PBS

*\*Wild card character*

ADRD; Alzheimer's disease-related dementia; AF/AFIB, atrial fibrillation; ARCD, age-related cognitive decline; BPSD, behavioural and psychological symptoms of dementia; CAL, chronic airflow limitation; CHF, congestive heart failure; CI, confidence interval; CMA, comprehensive medical assessment; COAD, chronic obstructive airway disease; COPD, chronic obstructive pulmonary disease; CVA, cerebrovascular accident; DLB, dementia with Lewy bodies; eGFR, estimated glomerular filtration rate; ICU, intensive care unit; IDDM, insulin-dependent diabetes mellitus; LVF, left ventricular failure; MADD, mixed anxiety-depressive disorder; MBS, Medicare Benefits Schedule; MCI, mild cognitive impairment; MDD, major depressive disorder; MMSE, mini-mental state examination; NAFLD, non-alcoholic fatty liver disease; NASH, non-alcoholic steatohepatitis; NIDDM, non-insulin dependent diabetes mellitus; PBS, Pharmaceutical Benefits Scheme; PDD, pervasive developmental disorder; PEG, percutaneous endoscopic gastrostomy; RVF, right ventricular failure; SEIFA, Socio-Economic Indexes for Areas, STEMI, ST-elevation myocardial infarction