



Supporting Information

Supplementary methods and results

**This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.**

Appendix to: Ní Chróinín D, Deane V, Pulikotil Zachariah R, et al. The likelihood of hospital-acquired complications in older people with dementia: a matched cohort study. *Med J Aust* 2024; doi: 10.5694/mja2.52462.

1. Medical conditions and comorbidity

Charlson comorbidity index and diagnostic codes

The Charlson comorbidity index was estimated as a function of concomitant diseases with each being weighted by a coefficient as follows:

$$\text{AMI} + \text{CHF} + \text{PVD} + \text{DEM} + \text{CVD} + \text{CPD} + \text{RHE} + \text{PU} + \text{DM} + \text{HEP1} + \\ \text{HP} \times 2 + \text{REN} \times 2 + \text{DMCC} \times 2 + \text{MAL} \times 2 + \text{HEP2} \times 3 + \text{MST} \times 6 + \text{HIV} \times 6$$

AMI, acute myocardial infarction; CHF, congestive heart failure; PVD, peripheral vascular disease; CVD, cerebral vascular disease; DEM, dementia; CPD, chronic pulmonary disease; RHE, rheumatologic disorders; PU, peptic ulcer; DM, diabetes; HEP1, mild liver disease; HP, hemiplegia/paraplegia; REN, renal disease; DMCC, diabetes with chronic complications; MAL, malignancy; HEP2, moderate or severe liver disease; MST, metastatic solid tumour; and HIV, human immunodeficiency disease or AIDS.

International Classification of Diseases, tenth revision, Australian modification (ICD-10-AM) diagnosis codes

Myocardial infarction: I21, I22, I23 and I25.2

Congestive heart failure: I50; I11.0; I13.0; I13.2

Peripheral vascular disease: I70; I71; I72; I73; I74; I77

Cerebrovascular disease: I60–I69; G45; G46

Dementia: F00–F03; F05.1; G30

Pulmonary disease: J40–J47; J60–J67; J68.4; J70.1; J70.3; J84.1; J92.0; J96.1; J98.2; J98.3

Connective tissue disease: M05; M06; M08; M09; M30–36; D86

Peptic ulcer disease: K22.1; K25–K28

Liver disease: B15.0; B16.0; B16.2; B18; B19.0; K70–K74; K76.0; K76.6; I85

Diabetes: E10–E11

Hemi/paraplegia: G81; G82

Renal disease: I12; I13; N00–N05; N07; N11; N14; N17–N19; Q61

Malignant conditions: C00–C96

Obesity: E65; E66

Pancreatitis: K85; K86.0; K86.1

Alcoholism and alcoholism-related conditions: F10; G31.2; G62.1; G72.1; I 42.6 K29.2; R78.0; T51; Z72.1

2. Hospital-acquired adverse events (ICD-10-AM codes)

Fall (W00-W19)

Pressure injury (L892, L893, L899)

Delirium (F050, F051, F058, F059, R410)

Pneumonia (J100, J110, J120-J123, J128, J129, J13-J18, J22)

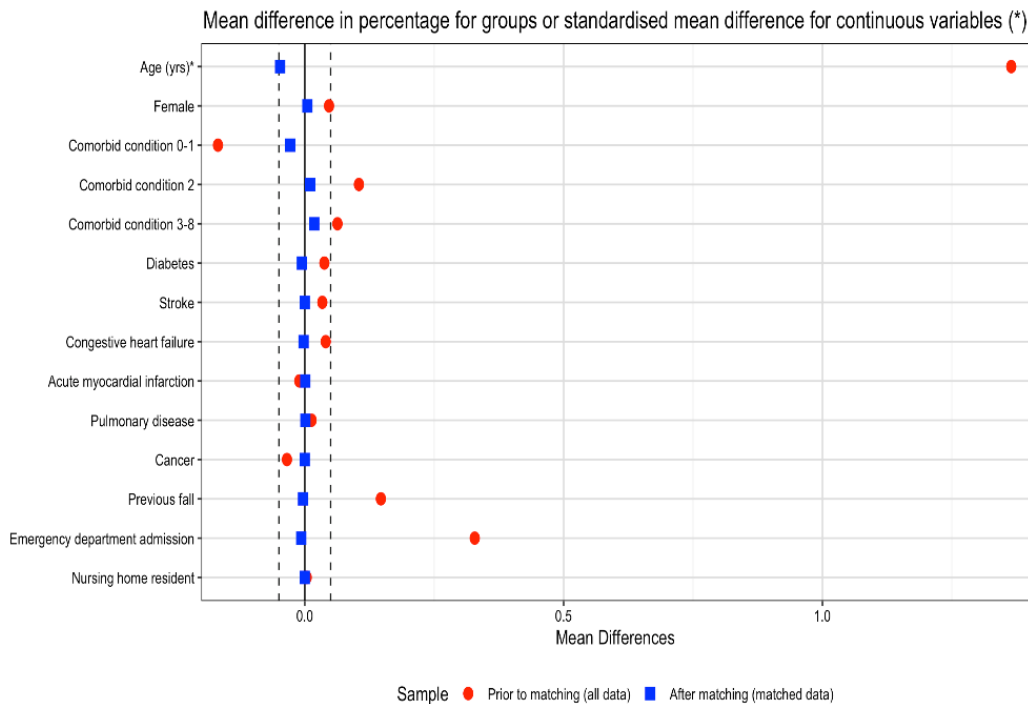
Venous thromboembolism (VTE) (I260, I269, I801, I802, I808)

Incontinence (R320, N393, N394, R150)

Malnutrition (E430, E440, E441, E460)

Figure 1.

A. Mean differences in proportions for categorical variables and standardised mean differences for the continuous variable (age), before and after matching.



B. Mean differences in proportions for categorical variables (with 95% confidence intervals) and standardised mean difference for the continuous variable (age) (with 95% confidence interval) after matching

