**Additional File 3: Table S1. Descriptive characteristics of studies included in systematic review and meta-analysis**

| Study | Design | Setting/Target population | Co-morbidities | N | Age | Female gender (%) | Living arrangements | Outcomes assessed[a] | Time of assessment[b] |
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| Choong [27] | Pseudo-RCT | Australia; all patients admitted through emergency department for surgical treatment of acute fracture of the femur. | NR | 111 | 81 | 72% | Most (n = NR) lived with family or significant others. | Index length of hospital stay; hospital readmissions; time to surgery; time to mobilization; time to aged care assessment for discharge placement; discharge | Index hospital admission; daily; 28 days after index hospital discharge. |

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| | | | | | | | | destination; hospital complications; post-discharge complications. | |
| Kennedy [28] | RCT | USA; English speaking patients aged 75+ reachable by telephone. | NR | 80 | 80 | 53% | Most (n = NR) lived with family or significant other in the community; community dwellers (96%); nursing home residents | Index length of hospital stay; hospital readmissions; mortality; time to first hospital readmission; change in living arrangement. | Index hospital admission; 2 and 8 weeks after index hospital discharge. |

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| | | | | | | | (4%). | | |
| Kleinpell [29] | RCT | USA; critically ill English speaking adults aged 65+ admitted to an intensive care unit for at least 24 hours and cognitively able to provide consent. | Cardiovascular 49%, oncological 21%, neurological 9%, hepatic or pancreatic 6%, and other 12%. | 100 | 73 | 34% | NR. | Index length of hospital stay; quality of life; readiness for discharge. | Day before anticipated discharge from hospital; 2 weeks after index hospital discharge. |
| Legrain [34] | RCT | France; French speaking adults aged 70+ admitted to an | Coronary artery disease 29%, HT 66%, arrhythmia | 665 | 86 | 66% | Living alone (47%). | Hospital readmissions; emergency department | Index hospital discharge; 3 and 6 |

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| | acute geriatric unit for emergency treatment of a medical condition. Excluded patients with an expected length of stay < 5 days, expected survival < 3 months, receiving palliative care, without health | 25%, dementia 22%, diabetes mellitus 16%, heart failure 15%, cancer 13%, pulmonary disease 12%, and stroke 1.4%. | visits; mortality; delay before readmission. | months after index hospital discharge. |

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| | | insurance, not residing in France. | | | | | | | |
| Lin [30] | Quasi-experimental | Taiwan; adults aged 65+ with hip fracture; able to walk; pre-fracture Barthel score ≥ 70 points; not cognitively impaired; not terminally ill. | NR | 50 | 79 | 36% | NR | Index length of hospital stay; hospital readmissions; satisfaction with discharge planning; quality of life; self-care knowledge; functional status. | Index hospital admission and discharge; 2 and 12 weeks after index hospital discharge. |

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| Naughton [33] | RCT | USA; Adults aged 70+ admitted from emergency department to medical care and not under care of hospital staff. | NR. Most frequent admitting diagnoses included CHF 8%, pneumonia 7%, syncope 5%, urinary tract infection 5%. | 111 | 80 | 57% | Living at home (78%). | Index length of hospital stay; discharge destination; costs. | Index hospital discharge. |
| Naylor [23] | RCT | USA; English speaking adults aged 65+ admitted from their homes with a | Coronary artery disease 48%, HT 52%, atrial tachycardia 35%, diabetes mellitus 38%, | 239 | 76 | 57% | NR other than admitted from their homes. | Index length of hospital stay; hospital readmissions or death after discharge; | Index hospital admission; 2, 6, 12, 26, and 52 weeks after |

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| | diagnosis of heart failure; not diagnosed with end-stage renal disease; alert and oriented; reachable by telephone after discharge, and residing within 60 miles from hospital. | and pulmonary disease 30%. | readmission length of hospital stay; mortality; satisfaction with discharge planning; quality of life; functional status; costs; time to first hospital readmission or death; unscheduled acute care | index hospital discharge. |

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| | | | | | | | | visits. | |
| Rich [32] | RCT | USA; adults aged 70+ admitted to medical unit with CHF, residing within catchment area, not planned to be discharged to nursing home or chronic care facility, without severe cognitive | HT 65%, diabetes mellitus 31%, prior MI 23%, prior CHF 63%. | 98 | 79 | 59% | NR; Living in community presumed because excluded patients with planned nursing home discharge. | Index length of hospital stay; hospital readmissions; readmission length of hospital stay; time to first hospital readmission. | Index hospital discharge; 90 days after index hospital discharge. |

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| | | impairment, psychiatric disturbance, or non-cardiac illness with probability of unpreventable readmission. | | | | | | | |
| Rich [31] | RCT | USA; adults aged 70+ admitted with CHF; one or more risk factors for readmission (history of | HT 76%, diabetes mellitus 28%, prior MI 43%, prior CHF 77%. | 282 | 79 | 59% | Living alone 43%; living with others 57%; living in community presumed because planned | Hospital readmissions; readmission length of hospital stay; mortality; quality of life; costs. | Index hospital admission; 90 days after index hospital discharge. |

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| | heart failure, > 3 hospitalizations within past 5 years, or CHF precipitated by acute MI or uncontrolled HT); living within the catchment area; not planned to be discharged to a long term care facility; no severe | nursing home discharges excluded. |

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| | dementia; no psychiatric illness; expected survival > 3 months. | |

**Notes:** [a] Not all outcomes measured at all time points. Where outcomes were comparable, narrative analysis or meta-analysis performed; [b] Duration of follow-up post index hospital discharge.

**Abbreviations:** CHF = congestive heart failure; HT = hypertension; MI = myocardial infarction; N = sample size; NR = not reported; RCT = randomized controlled trial; USA = United States of America