Appendix 2: Table of Included Trials [posted as supplied by author]

Provenance	Participants	Intervention	Outcomes	Authors Assessment of Risk of Bias
Ward				
Applegate 1990 Location: Memphis, USA (1500-bed rehabilitation hospital) Admission within 72 hours	N=155, Mean age: 78.8, 24% male **Inclusion criteria:** over 65, at risk for nursing home placement and/or functional impairment Some patients under 65 were considered if they met the criteria **Exclusion criteria:** unstable medical conditions; short-term monitoring required; survival less than 6 months; serious chronic mental impairment; nursing home placement inevitable	**Team members:** specialist nurse, ward nurses, social workers, physiotherapists, occupational therapists, dieticians, speech and language pathologists, audiologists, psychologists **Team organisation:** comprehensive assessment, multidisciplinary meetings at least weekly, regular use of standard assessment tools	**Outcomes:** Mortality, ADL, days spent in nursing homes, mood, and cognition at 6 months and 1 year **Trial conclusions:** improved function and reduced nursing home admission	Random sequence generation: Low Risk Allocation Concealment: Unclear Risk Blinding: Unclear Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
Asplund 2000 Location: Umea, Sweden (University Hospital) Admission direct from Emergency Department	N=413, Mean age: 81, 40% male (approx) **Inclusion criteria:** all patients over 70 admitted acutely **Exclusion criteria:** patients requiring specialist unit (ICU, CCU, Stroke)	**Team members:** senior geriatrician, ward nurses, social workers, physiotherapists, occupational therapists, dieticians **Team organisation:** comprehensive assessment, weekly multidisciplinary meetings and regular goal setting	**Outcomes:** Global outcome (death, institutionalisation, dependence or psychological outcomes), death, institutionalisation, Barthel Index, cognitive function, psychological outcomes **Trial conclusions:** reduced institutionalisation	Random sequence generation: Unclear Risk Allocation Concealment: Low Risk Blinding: High Risk Incomplete outcome data: High Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Low Risk
Cohen 2002 Location: USA (VA multicentre study) Stepdown ward RCT with 2 x 2 factorial design, inpatient geriatric ward versus usual care and outpatient geriatric follow up versus usual care	N=1388, Mean age: 74, 98% male **Inclusion criteria:** age at least 65, hospitalised on a medical ward, expected length of stay > 2 days, frailty (presence of stroke, history of falls, inability to perform ADLs, prolonged bed rests, incontinence) **Exclusion criteria:** admissions from nursing home, terminal illness	**Team members:** senior geriatrician, specialist nurse, social workers, physiotherapists, occupational therapists, dieticians, pharmacists **Team organisation:** comprehensive assessment, at least weekly MDT meeting	**Outcomes:** Death, perceived health status, basic and extended ADL, costs **Trial conclusions:** no overall effects on survival. Improved physical function with inpatient care, improved cognitive function with outpatient care	Random sequence generation: Low Risk Allocation Concealment: Low Risk Blinding: Low Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Low Risk
Collard 1985 Location: Boston, USA (2 community hospitals) Direct admission to ward from Emergency Department	N=695, Mean age: 78, 40% male (approx) **Inclusion criteria:** over 65, under the care of a participating physician, either medical or surgical admissions **Exclusion criteria:** none given	**Team members:** ward nurses, social workers, senior physician, physiotherapist, occupational therapist **Team organisation:** at least weekly multidisciplinary meetings, specialised ward environment,	**Outcomes:** death, length of stay, complications, institutionalisation, dependence, self-rated health **Trial Conclusions:** Specialist care is cost effective	Random sequence generation: Unclear Risk Allocation Concealment: Allocation Concealment Blinding: High Risk Incomplete outcome data: High Risk Selective Reporting: Unclear Risk Other Bias: Unclear Risk

RCT (1:2 allocation, treatment:control)		comprehensive assessment, protocolised care, standardised assessment tools		Baseline outcome measurements similar: Unclear Risk Baseline characteristics similar: Unclear Risk Study protected against contamination: Low Risk
Counsell 2000 Location: Akron City, Ohio, USA (Community Teaching Hospital) Direct admission from the Emergency Department	N=1531, Mean age: 80, 40% male (approx) **Inclusion criteria:** community-dwelling persons aged 70 or older admitted to medical or family practice service **Exclusion criteria:** transferred from other hospital, nursing home, required speciality unit admission, elective admissions, LOS < 2 days	**Team members:** senior geriatrician, specialist nurse, ward nurses, social workers, physiotherapists **Team organisation:** comprehensive assessment, at least weekly multidisciplinary meetings, standardised assessment tools, specialised ward environment, protocolised care	**Outcomes:** death, activities of daily living, institutionalisation, dependence **Trial conclusions:** improved combined outcomes of functional decline or nursing home admission in intervention group	Random sequence generation: Low Risk Allocation Concealment: Low Risk Blinding: High Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
Fretwell 1990 Location: Providence, Rhode Island, USA (Teaching Hospital) Direct admission from the Emergency Department	N=436, Mean age: 83, 28% male **Inclusion criteria:** >75, physician given consent, did not require CCU or ICU **Exclusion criteria:** none given	**Team members:** specialist nurses, ward nurses, senior geriatrician, pharmacist, physiotherapist, dietician, social worker **Team organisation:** at least weekly multidisciplinary meetings, goal-setting, standardised assessment tools	**Outcomes:** death, cognition, dependence, mood, costs, institutionalization **Trial conclusions:** no significant difference observed between the groups	Random sequence generation: Unclear Risk Allocation Concealment: Unclear Risk Blinding: High Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Low Risk
Harris 1991 Location: Adelaide, Australia Direct admission from the Emergency Department	N=267, Mean age: 78, 40% male (approx) **Inclusion criteria:** over 70 years of age, non-elective, not re-admitted, non-nursing home dwellers, resident in Southern Health Region **Exclusion criteria:** none given	**Team members:** senior geriatrician, social workers, occupational therapists, physiotherapists, ward nurses **Team organisation:** not specified	**Outcomes**: death, institutionalisation, dependency, cognitive status, length of stay **Trial conclusions:** no evidence of benefit from admission to a Geriatric Assessment Unit for unselected adults over 70 years.	Random sequence generation: Unclear Risk Allocation Concealment: High Risk Blinding: High Risk Incomplete outcome data: Unclear Risk Selective Reporting: Unclear risk Other Bias: High Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Low Risk
Kay 1992 Location: Toronto, Canada (Community Hospital) Stepdown ward	N=59, Mean age: 81, 45% male **Inclusion criteria:** over 70, medically stable, possible acute confusion, functional impairment, multiple geriatric problems	**Team members:** specialist nurses, social workers, occupational therapists, physiotherapists, pharmacists, dietitian **Team organisation:** comprehensive	**Outcomes:** Institutionalisation, activities of daily living, cognitive function **Trial conclusions:** inadequate evidence of benefit from a	Random sequence generation: Unclear Risk Allocation Concealment: Unclear Risk Blinding: High Risk Incomplete outcome data: Unclear Risk Selective Reporting: Unclear Risk

	Exclusion criteria: medically unstable, chronic cognitive impairment, independent	assessment, at least weekly MDT, standardised assessment tools	Geriatric Assessment Unit	Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
Landefeld 1995 Location: Cleveland, Ohio, USA (Teaching Hospital) Direct admission from the Emergency Department	N=651, Mean age: 80, 35% male (approx) **Inclusion criteria:** 70 or older admitted for general medical care **Exclusion criteria:** patients admitted to a speciality unit - ICU, cardiology, telemetry, oncology	**Team members:** trainee geriatrician, ward nurses, social worker, physiotherapists, occupational therapists, dieticians **Team organisation:** at least weekly MDT, use of standardised assessment tools, protocolised care, specialised ward environment	**Outcomes:** death, institutional care, cognition, dependence **Trial conclusions:** fewer patients discharged to a nursing home, Improved functional outcomes at discharge	Random sequence generation: Low Risk Allocation Concealment: Low Risk Blinding: Unclear Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Low Risk
Nikolaus 1999 Location: Heidelberg, Germany (University Hospital) Admission within 48 hours Trial methodology: RCT with 2 intervention arms - geriatric assessment ESD (Home Intervention Team) or geriatric assessment alone versus usual care	N=545, Mean age: 81, Male to female ratio: unclear **Inclusion criteria:** elderly patients with multiple chronic conditions or functional deterioration or who were at risk of nursing home placement **Exclusion criteria:** terminal illness, severe dementia, patients who lived >15 km away	**Team members:** senior geriatrician, specialist nurses, physiotherapists, occupational therapists, social workers. (The home intervention team consisted of 3 nurses, a physiotherapist, an occupational therapist, a social worker and secretarial support) **Team organisation:** comprehensive assessment, standardised assessment tools, outpatient follow up (HIT team)	**Outcomes:** Institutionalisation, readmission, costs, length of stay, perceived health status, dependence **Trial conclusions:** Comprehensive Geriatric Assessment in association with early supported discharge improves functional outcomes and may reduce length of stay	Random sequence generation:Low Risk Allocation Concealment: Low Risk Blinding: Low Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Unclear Risk Baseline characteristics similar: Unclear Risk Study protected against contamination: Low Risk
Powell 1990 Location: Manitoba, Canada Direct admission from the Emergency Department	N=203, Mean age: uncertain, Male to female ratio: uncertain **Inclusion criteria:** acute medical admissions over 74 years **Exclusion criteria:** requiring psychiatric or surgical care	**Team members:** unknown **Team organisation:** unknown	**Outcomes:** death, institutionalisation, cognitive function, depression, dependence **Trial conclusions:** non-significant differences in favour of the treatment group	Random sequence generation: Unclear Risk Allocation Concealment: Unclear Risk Blinding: Unclear Risk Incomplete outcome data: Unclear Risk Selective Reporting: Unclear Risk Other Bias: Unclear Risk Baseline outcome measurements similar: Unclear Risk Baseline characteristics similar: Unclear Risk Study protected against contamination: Unclear Risk
Rubenstein 1984	N=123, Mean age: 78, 96% male	**Team members:** senior geriatrician,	**Outcomes:** death,	Random sequence generation: Unclear Risk

Location: Los Angeles, Ca, USA (VA hospital) Stepdown ward	**Inclusion criteria:** patients over 65 still in hospital one week after admission with persistent medical, functional or psychosocial problem **Exclusion criteria:** severe dementia or disabling disease resistant to further medical management; those with no social supports; those functioning well who would definitely return to community, independent or severely ill and dependent patients excluded	trainee geriatrician, specialist nurses, ward nurses, social workers, physiotherapists, occupational therapists, dietician, audiologists, dentists and psychologists **Team organisation:** at least weekly MDT meetings, standardised assessment tools, outpatient follow up	institutionalisation, costs, cognitive status, morale **Trial conclusions:** reduced mortality, reduced institutionalisation, improved functional status and morale	Allocation Concealment: Unclear Risk Blinding: High Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Low Risk
Saltvedt 2002 Location: Trondheim, Norway (Community Hospital) Admission within 72 hours	N=254, Mean age: 82, 35% male (approx) **Inclusion criteria:** frail patients: acute impairment of ADL, imbalance, dizziness, impaired mobility, chronic disability, weight loss, falls, confusion, depression, malnutrition, vision or hearing impairment, mild or moderate dementia, urinary incontinence, social or family problems, polypharmacy **Exclusion criteria:** nursing home patients, fully independent, cancer with metastasis, severe dementia	**Team members:** senior geriatrician, trainee geriatrician, specialist nurse, social workers, physiotherapists, occupational therapists, dentists **Team organisation:** at least weekly MDTs, protocolised care, early mobilisation	**Outcomes:** mortality, ADL, function, Institutionalisation, cognition, prescribing **Trial conclusions:** a reduction in short-term mortality, no difference in long-term mortality	Random sequence generation: Low Risk Allocation Concealment: Low Risk Blinding: Unclear Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Low Risk
Shamian 1984 Location: Montreal, Canada (University Teaching Hospital) Stepdown ward RCT evaluating temporary relocation to a geriatric ward	N=36, Mean age: uncertain, 40% male **Inclusion criteria:** over 65s, medically stable, awaiting transfer **Exclusion criteria:** acutely unwell, on priority list for transfer to geriatric care or a long-term care institution	**Team members:** senior geriatrician, senior geriatric nurse, experienced geriatric nurses, social workers, physiotherapists and occupational therapists only by referral **Team organisation:** use of standardised assessment tools	**Outcomes:** death, medication use, activities of daily living **Trial conclusions:** geriatric wards can result in reduced drug prescribing, and aid transfers	Random sequence generation: Low Risk Allocation Concealment: Unclear Risk Blinding: High Risk Incomplete outcome data: High Risk Selective Reporting: Unclear Risk Other Bias: Unclear Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
White 1994 Location: Nashville, Tennessee, USA (University Hospital) Stepdown ward	N=40, Mean age: 76.5, 37% male **Inclusion criteria:** age 65 or over, medically stable, "potential for making improvement in physical, functional or psychological function", complicated discharge or awaiting placement. Terminal patients accepted. **Exclusion criteria:** not explicitly	**Team members:** senior geriatrician, geriatric nurse specialist, social worker, dietician, pharmacist, physiotherapist, occupational therapist, speech and language therapist **Team organisation:** admission to a 6-bedded stepdown ward. Weekly	**Outcomes:** death, nursing home admission, functional status, 30-day readmissions and costs **Trial conclusions:** CGA is cost-effective and improves patient outcomes without increasing length of stay	Random sequence generation: Low Risk Allocation Concealment: Unclear Risk Blinding: High Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Unclear Risk Baseline outcome measurements similar: Unclear Risk

	stated.	multidisciplinary meetings, full comprehensive assessment, therapy and discharge planning. Review of medications and appropriate limits on investigations. Control group were reviewed by senior nurse and geriatrician and recommendations were made to usual care team.		Baseline characteristics similar: Unclear Risk Study protected against contamination: Unclear Risk
Team				
Hogan 1987 Location: Halifax, Canada (Community Hospital) Stepdown team (within a week of hospitalisation)	N=113, Mean age: 82, 30% male (approx) **Inclusion criteria:** all patients over 75 admitted to Dept of Medicine on an emergency basis, with confusional state, impaired mobility, falls, urinary incontinence, polypharmacy, living in a nursing home or admission within previous 3 months **Exclusion criteria:** ICU, stroke, permission refused by patient or attending physician	**Team members:** senior geriatrician, specialist nurse, physiotherapists **Team organisation:** comprehensive assessment, at least weekly MDT	**Outcomes:** death, institutionalisation, cognitive status, readmissions, length of stay, costs **Trial conclusions:** improved cognitive status, reduced polypharmacy and reduced short-term mortality demonstrated	Random sequence generation: Low Risk Allocation Concealment: High Risk Blinding: Unclear Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Unclear Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
Kircher 2007 Location: Tubingen, Germany Stepdown team RCT with a second control group for external comparison	N=435, Mean age: 78, 33% males (approx) **Inclusion criteria:** over 65, with evidence of functional impairment, potential breakdown of the home situation **Exclusion criteria:** nursing home patients, independent patients with no functional impairment, a terminal condition, severe dementia, not able to speak German, living further than 60 miles from the hospital	**Team members:** senior geriatrician, social worker, specialist nurse plus other associated health professionals as required **Team organisation:** comprehensive assessment and treatment recommendations, at least weekly multidisciplinary meetings, discharge planning, follow up telephone calls	**Outcomes:** death, institutionalisation, activities of daily living, cognition, mood, number of drugs **Trial conclusions:** care by CGA teams did not improve re-hospitalisation or nursing home admissions	Random sequence generation: Unclear Risk Allocation Concealment: Unclear Risk Blinding: Low Risk Incomplete outcome data: High Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
McVey 1989 Location: Durham, NC, USA (VA Centre) Acute team (within 48 hours)	N=178, Mean age: 81, 96% male **Inclusion criteria:** patients 75 or older **Exclusion criteria:** admitted to ICU, had previously received geriatric care, expected length of stay less than 48 hours	**Team members:** senior geriatrician, trainee geriatrician, specialist nurse, social worker **Team organisation:** comprehensive assessment and recommendations made, at least weekly multidisciplinary meetings, standardised assessment tools	**Outcomes:** activities of daily living/dependence, institutionalisation, death **Trial conclusions:** no significant effect on functional decline	Random sequence generation: Low Risk Allocation Concealment: Unclear Risk Blinding: Low Risk Incomplete outcome data: Unclear Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk

Naughton 1994 Location: Chicago, Il, USA (Urban Teaching Hospital) Direct entry from the Emergency Department	N=111, Mean age: 80, 40% male (approx) **Inclusion criteria:** 70 years admitted from ED to medicine service and did not regularly receive care from attending internist on staff at study hospital at time of admission. **Exclusion criteria:** admission to ICU or transferred to a surgical service	**Team members:** senior geriatrician, social worker, specialist nurse, physiotherapist **Team organisation:** geriatrician and social worker comprise core GEM team with nurse specialist and physiotherapist as required. Carried out systematic evaluation of patient's medical, mental, functional and psychosocial status and needs. Team conference 2 to 3 times weekly.	**Outcomes:** death, institutionalisation, costs, length of stay **Trial conclusions:** reduced hospital costs	Random sequence generation: Low Risk Allocation Concealment: Low Risk Blinding: High Risk Incomplete outcome data: High Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
Reuben 1995 Location: Los Angeles, Ca, USA (multicentre HMO) Stepdown team Multicentre RCT	N=2353, Mean age: 78, 53% male (approx) **Inclusion criteria:** over 65, with one of 13 criteria: stroke, immobility, impairment ADL, malnutrition, incontinence, confusion or dementia, prolonged bed rest, falls, depression, social or family problems, unplanned re-admission, new fracture, over 80 **Exclusion criteria:** admitted for terminal care, lived outside HMO area, did not speak English, were admitted from a nursing home	**Team members:** senior geriatrician, nurse specialist, social workers, physiotherapists **Team organisation:** comprehensive assessment, at least weekly MDT, standardised assessment tools, outpatient follow up	**Outcomes:** death, institutionalisation, dependency, cognitive status, perceived health status **Trial conclusions:** no significant differences identified in mortality, functional status or perceived health	Random sequence generation: Low Risk Allocation Concealment: Unclear Risk Blinding: High Risk Incomplete outcome data: Low Risk Selective Reporting: Low Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: Unclear Risk
Thomas 1993 Location: Winston-Salem, NC, USA (Community Hospital) Acute team (within 48 hours)	N=132, Mean age: 77, 35% (approx) **Inclusion criteria:** all patients over 70 **Exclusion criteria:** refusal of patients, ICU, CCU, obvious terminal illness, renal haemodialysis, place of residence greater than 50 miles from hospital	**Team members:** senior geriatrician, geriatric nurse specialist, social worker, dietician, pharmacist, physiotherapist **Team organisation:** comprehensive assessment, and recommendations made in patients' charts as well as follow up visits versus assessment with no recommendations in the control group	**Outcomes:** death, dependence **Trial conclusions:** short-term reductions in mortality which still remain at one year. Additional trends to better functional status and reduced readmission	Random sequence generation: Low Risk Allocation Concealment: Unclear Risk Blinding: High Risk Incomplete outcome data: Unclear Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk Study protected against contamination: High Risk
Winograd 1993 Location: Palo Alto, Ca, USA (VA Teaching Hospital) Stepdown team	N=197, Mean age: 76, 100% male **Inclusion criteria:** all male patients 65 or over, expected to stay >96 hours, within 2-hour drive, not enrolled in geriatric/rehab programme, functionally impaired "frailty": confusion, dependence in ADLs, polypharmacy, stressed caregiver system	**Team members:** senior geriatrician, trainee geriatrician, specialist nurse input, social work, dietician **Team organisation:** comprehensive assessment, standardised assessment tools	**Outcomes:** death, institutionalisation, cognition, dependence **Trial conclusions:** no evidence of benefit from geriatric consultation team	Random sequence generation: Low Risk Allocation Concealment: Low Risk Blinding: High Risk Incomplete outcome data: Low Risk Selective Reporting: Unclear Risk Other Bias: Low Risk Baseline outcome measurements similar: Low Risk Baseline characteristics similar: Low Risk

	Exclusion criteria: independent, permanent nursing home resident, less than 6 months life-expectancy	Study protected against contamination: Unclear Risk