Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
Anderson et al., 2000 PEDro score: 8	8	Early supported discharge (n=42) vs. Conventional care (n=44) **Treatment details**: Early supported discharge: discharged from hospital within 48 hours of randomization; home adaptations, home-based individualized therapy for 5 weeks and referral to community agencies. Conventional care: standard rehabilitation care in an acute-care medical/geriatric ward or multidisciplinary stroke rehabilitation unit and standard outpatient or community-based follow-up.	**At 6 months post-randomization:** Patient outcomes: (-) Medical Outcomes Study Short Form (SF-36) (-) Modified Barthel Index (-) Mini-Mental State Examination (-) Nottingham Health Profile (-) McMaster Family Assessment Device – general functioning subscale (-) Adelaide Activity Profile (-) General Health Questionnaire (GHQ-28) (-) Patient satisfaction Carer outcomes: (+) SF-36 (mental health score only)* (-) McMaster Family Assessment Device (+) Adelaide Activities Profile (household maintenance activities only)* (-) GHQ-28 (-) Caregiver Strain Index (-) Carer satisfaction Process measures: (+) Length of stay (+) Total bed days (-) Frequency of readmission to hospital (-) Use of community services (-) Admission to residential care (-) Incidence of adverse events (death and falls)

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
			* significant between-group difference in favour of conventional care compared to early supported discharge.
Askim et al., 2006 PEDro score: 7	7	Early supported discharge and extended stroke service (n=31) vs. Usual stroke unit service (n=31) **Treatment details**: Both groups received standard stroke care for the first 2 weeks post-stroke. Usual stroke unit care: further standard inpatient rehabilitation and/or a standard follow-up programme as necessary. Early supported discharge and extended service: home-based program coordinated by a mobile stroke team for 4 weeks post-discharge, with an emphasis on early and intensive task-specific home-based exercise therapy	**At 6, 26 and 52 weeks post-stroke**: (-) Berg Balance Scale (-) 5 Meter Walking Test (-) Scandinavian Stroke Scale Note: there was a significant between-group difference in 5m walking test results at 1 week post-stroke (before intervention had commenced), in favour of usual stroke unit service compared to early supported discharge and extended stroke service.
Bautz-Holter et al., 2002 PEDro score: 6	6	Early supported discharge (n=42) vs. Conventional rehabilitation (n=40) **Treatment details**: Early supported discharge: community-based rehabilitation under coordination of a multidisciplinary project team; Conventional rehabilitation: multidisciplinary stroke rehabilitation unit.	**At 3 months post-stroke**: Patient outcomes: (-) Nottingham Extended ADL scale (+) General Heath Questionnaire (GHQ-20) (-) Montgomery Asberg Depression Rating Scale (-) Patient satisfaction Carer outcomes: (-) Carer satisfaction (-) GHQ-20

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
			At 6 months post-stroke: Patient outcomes (-) Nottingham Extended ADL (-) GHQ-20 (-) Montgomery Asberg Depression Rating Scale (-) Patient satisfaction Carer outcomes: (-) Carer satisfaction (-) GHQ-20 Process measures: (-) Health services (-) Mortality (-) Institutionalization
Donnelly et al., 2004 PEDro score: 6	6	Early discharge rehabilitation (n=59) vs. Conventional rehabilitation (n=54) **Treatment details**: Early discharge rehabilitation: home-based services from physical, occupational and speech therapists and rehabilitation assistants for 45 minutes/session, 2.5 sessions/week for 3 months. Conventional rehabilitation: standard in-patient rehabilitation in a stroke unit and follow-up rehabilitation in a day hospital.	**At 12 months post-stroke**: Patient outcomes: (-) Barthel Index (-) Nottingham ADL scale (-) Medical Outcomes Study Short Form 36 (SF-36) (-) 10m timed walk test (-) EuroQol (-) Non-standardized quality of life questionnaire (+) Non-standardized patient satisfaction questionnaire Carer outcomes:

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
			(-) Non-standardized carer satisfaction questionnaire (-) Caregiver Strain Index Process measures: (-) Length of stay (+) Service Use Questionnaire (OT, social work and rehabilitation assistant services; not PT, Meals on Wheels) (-) Unit Costs of Health and Social Care
FjÃ¦rtoft et al., 2004 PEDro score: 5	5 (1 year follow-up of Indredavik et al., 2000)	Extended stroke unit service (ESUS) (n=133) vs. Ordinary stroke unit service (OSUS) (n=125) **Treatment details**: ESUS: mobile stroke team (nurse, physical and occupational therapists and physician) coordinated home services and follow-up rehabilitation program. OSUS: patients received care in a combined acute and rehabilitation stroke unit, and follow-up was organized by the rehabilitation clinics and/or primary healthcare system.	**At 1 year post-stroke:** Patient outcomes: (+) Nottingham Health Profile (-) Frenchay Activity Index (-) Montgomery Asberg Depression Scale (-) Mini-Mental State Examination Carer outcomes: (-) Caregiver Strain Index
FjÃ¦rtoft et al., 2011 PEDro score: 7	7 (5 years follow-up of Indredavik et al., 2000)	Extended stroke unit service (ESUS, n=155) vs. Ordinary stroke unit service (OSUS, n=151) **Treatment details**:	**At 5 years post-stroke:** (-) Modified Rankin Scale (-) Barthel Index (-) Frenchay Activity Index (-) Mini-Mental State Examination (-) Scandinavian Stroke Scale

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		ESUS: mobile stroke team (nurse, physical and occupational therapists and physician) coordinated home services and follow-up rehabilitation program. OSUS: patients received care in a combined acute and rehabilitation stroke unit, and follow-up was organized by the rehabilitation clinics and/or primary healthcare system.	Process measures: (+) Mortality (+) Institutionalization * * significant between-group difference in number of patients living at home.
Gräsel et al., 2006 PEDro score: N/A (quasi-experimental design)	N/A (quasi-experimental design)	Intensification of transition vs. Standard transition Treatment program: Therapeutic weekend care Individual training course and psycho-educational seminars for family carers Telephone counselling 3 months after discharge	**At 31 months post-discharge (follow-up): For patients:** (+) Institutionalization (+) Morbidity
GrÃ¤sel et al., 2005 PEDro score: N/A (quasi-experimental design)	N/A (quasi-experimental design)	Intensification of transition vs. standard transition Treatment program: Therapeutic weekend care Individual training course and psycho-educational seminars for family carers Telephone counselling 3 months after discharge	**At 4 weeks after discharge:** Patients outcomes: (-) Barthel Index (-) Functional Independence Measure (FIM) (-) Timed Up and Go Test (-) Ashworth Spasticity Scale (-) Frenchay Arm Test (-) Medical Outcomes Study Short Form 36 (SF-36) (-) Number of physician visits (+) Newly appearing illnesses Carers outcomes: (-) Giessen Symptom List (GSL-24) (-) Zerssen Depression Scale (D-S)

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
			(-) Burden Scale for Family Caregivers (BSFC) **At 6 months after discharge:** Patients outcomes: (-) Barthel Index (-) FIM (+) TUG (-) Ashworth Spasticity Scale (-) Frenchay Arm Test (-) SF-36 (+) Number of physician visits (-) Newly appearing illnesses Carers outcomes: (-) GSL-24
Hui et al., 1995 PEDro score: 5	5	Early supported discharge (n=59) vs. Conventional care (n=61) **Treatment details**: Early supported discharge: managed by a geriatrician, discharged home from acute or rehabilitation ward and received ongoing rehabilitation at a geriatric day hospital. Conventional care: followed by a neurologist in the acute and rehabilitation wards and through an outpatient clinic following discharge.	**At 3 months post-stroke:** Patient outcomes: (-) Barthel Index* (-) Well-being (-) Sleep quality (-) Geriatric Depression Scale (-) Patient satisfaction Carer outcomes: (-) Carer satisfaction **At 6 months post-stroke:** Patient outcomes: (-) Barthel Index

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
			(-) Well-being (-) Sleep quality (-) Geriatric Depression Scale (-) Patient satisfaction Carer outcomes: (-) Carer satisfaction Process measures: (-) Length of stay (-) Mortality (-) Readmission (+) Outpatient services** (-) Community services (-) Cost * Significant between-group difference in BI change scores from baseline to 3 months in a subgroup of patients with BI score ≤15 ** Fewer outpatient visits at 6 months favoring early supported discharge compared to conventional care.
Indredavik et al., 2000 PEDro score: 7	7	Extended stroke unit service (ESUS, n=160) vs. Ordinary stroke unit service (OSUS, n=160) **Treatment details**: ESUS: mobile stroke team (nurse, physical and occupational therapists and physician) coordinated home services and follow-up rehabilitation program.	**At 6 weeks post-stroke**: (-) Barthel Index (-) modified Rankin Scale At 26 weeks post-stroke: (-) Barthel Index (+) modified Rankin Scale Note: Subgroup analysis of patients with moderate to severe stroke showed a significant

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		OSUS: patients received care in a combined acute and rehabilitation stroke unit, and follow-up was organized by the rehabilitation clinics and/or primary healthcare system	between-group difference in BI and mRS scores in favour of the ESUS compared to the OSUS. **Process measures at discharge**: (+) Institutionalization* (-) Mortality (+) Length of hospital stay **Process measures at 6 weeks post-stroke**: (+) Institutionalization* (-) Mortality **Process measures at 26 weeks post-stroke**: (-) Institutionalization (-) Mortality * Note: more ESUS patients were discharged home and fewer were discharged to institutions.
Langhome et al., 2005 PEDro score: N/A (meta-analysis)	N/A (meta-analysis)	Early supported discharge vs. Conventional care	**At end of treatment and at follow-up:** Patient outcomes: (-) Activities of daily living (ADLs) (+) Extended ADLs (-) Subjective health status (-) Mood (+) Satisfaction with services Carer outcomes: (-) Subjective health status (-) Mood

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
			(-) Satisfaction with services Subgroup analysis: (+) Stroke severity * (+) ESD characteristics ** (+) Length of stay *** Process measures: (+) Death/dependency (+) Death/institutionalisation (+) Length of hospital stay * reduced odds of mortality or dependency in patients with moderate stroke than those with severe stroke; and reduced duration of hospital stay for severe stroke subgroup than for moderate stroke group ** reduced odds of mortality and dependency for coordinated multidisciplinary ESD team than those without ESD team. *** reduced length of stay in the hospital outreach group than in the community outreach group.
Mayo et al., 2000 PEDro score: 6	6	Prompt discharge and home rehabilitation (n=58) vs. Usual care (n=56). **Treatment details**: The intervention group received prompt discharge and a 4-week rehabilitation program consisting of home visits and telephone monitoring from a multidisciplinary team (nursing, OT, PT, S-LP, dietetics).	**At 4 weeks (post intervention):** (-) Medical Outcomes Study Short Form-36 (SF-36) Physical Health component (-) SF-36 Mental Health component (-) SF-36 subscales (-) Canadian Neurological Scale (-) Stroke Rehabilitation Assessment of Movement (-) Time Up and Go test

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		Usual care comprised rehabilitation services through hospital, inpatient/outpatient rehabilitation or community clinics.	(-) Barthel Index (-) Older American Resource Scale for Instrumental ADLs (+) Reintegration to Normal Living Index **At 3 months post-stroke (follow-up):** (+) SF-36 Physical Health component (-) SF-36 Mental Health component (+) SF-36 subscales (Physical subscale only) (-) Canadian Neurological Scale (-) Stroke Rehabilitation Assessment of Movement (-) Time Up and Go test (-) Barthel Index (+) Older American Resource Scale for Instrumental ADLs (-) Reintegration to Normal Living Index Process measures: (+) Length of stay (-) Service use
Pessah-Rasmussen & Wendel, 2009 PEDro score: N/A (quasi-experimental study)	N/A (quasi-experimental design)	Early supported discharge (ESD) (N=313: 1997-1998 cohort, n=87; 2005-2006 cohort, n=226) vs. Control population (all stroke cases in Malmö alive at three months post stroke (N=1867: 1997-1998, n=514; 2005-2006) (n=1353). **Treatment details**:	**At post-treatment:** (+) Katz ADL Index (Feeding, Transfers, Toileting, Dressing, Bathing, Grooming, Communication) **At 6 months post-stroke:** (+) Katz ADL Index (Transfers, Dressing) At 12 months post-stroke:

Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		ESD coordinated by a stroke team and comprised a pre-discharge home visit and post-discharge care that included caregiver counseling and individualized home-based physical, occupational and speech therapy, nursing, neuropsychology and social worker services that were provided until the patient achieved the identified rehabilitation goals.	(-) Katz ADL Index Process measures: (+) Living alone* (-) Length of stay NOTE: Katz ADL Index scores reflect within-group differences in the 1997-1998 ESD cohort only. * Significant between-group difference in number of patients living alone, in 2005-2006 cohort.
Rodgers et al., 1997 PEDro score: 6	6	Early supported discharge (n=46) vs. Conventional care (n=46) **Treatment details**: ESD: pre-discharge home visit, continued home-based rehabilitation services (physical and occupational therapy, speech-language pathology and social work), interdisciplinary review meetings and information sheets from a stroke discharge team, and home care services from community agencies. Conventional care: inpatient stroke unit, general medical ward or care for the elderly ward, with ward-organized discharge planning and outpatient rehabilitation and community support services.	**At 7-10 days post-discharge and 3 months post-stroke:** Patient outcomes: (-) Nottingham Extended Activities of Daily Living Scale (-) Oxford Handicap Scale (-) Dartmouth Coop Function Charts (-) Wakefield Depression Inventory Carer outcomes: (-) General Health Questionnaire (GHQ-30) Process measures: (+) Length of stay (-) Readmission rates (-) Mortality (-) Institutionalization

Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
Ronning & Guldvog, 1998 PEDro score: 6	6	Municipality rehabilitation (n=124) vs. Hospital rehabilitation (n=127) **Treatment details**: Municipality rehabilitation: nursing home rehabilitation on inpatient or day-patient basis, and further ambulatory rehabilitation by a visiting physical therapist, speech therapist and/or nurse. Hospital rehabilitation: generalized hospital rehabilitation unit that provided coordinated multidisciplinary rehabilitation consisting of nursing care, physical, occupational and speech therapy, social work and neurologist services.	**At 7 months post-stroke:** (-) Barthel Index (-) Scandinavian Stroke Scale (-) Medical Outcome Study Short Form (SF-36) Patients with moderate to severe stroke: (+) Barthel Index* (+) Scandinavian Stroke Scale* (-) SF-36 (-) Death (-) Need for long term care (+) Dependency* (+) Death or dependency* Patients with mild stroke: (-) Barthel Index (-) Scandinavian Stroke Scale (-) SF-36 (-) Death (+) Need for long term care (-) Dependency (-) Death or dependency * Results in favour of hospital rehabilitation vs. municipality rehabilitation. Process measures: (-) Mortality (-) Need for long term care (-) Dependency (BI score <75)

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
			(+) Dependency or death* *significant between-group difference in combined outcome of mortality or dependency favoring the hospital rehabilitation group.
Rudd et al., 1997 PEDro score: 5	5	Specialist community rehabilitation (n=167) vs. Conventional hospital and community care (n=164) **Treatment details**: Specialist community rehabilitation group received an individual care plan which included physiotherapy, occupational therapy, and speech therapy for up to three months. Conventional care was provided in a stroke unit or general medical or elderly care ward, with outpatient services through a hospital-based stroke clinic, geriatric day hospital, generic domiciliary rehabilitation services, and community services.	**At 12 months post-stroke**: Patient outcomes: (-) Barthel Index (-) Motricity Index (-) Mini-Mental State Examination (-) Frenchay Aphasia Screening Test (-) Rivermead Activity of Daily Living Scale (-) Hospital Anxiety and Depression Scale (-) 5 meter timed walk test (-) Nottingham Health Profile (+) Patient satisfaction (hospital care only) Carer outcomes: (-) Caregiver Strain Index (-) Carer satisfaction Process measures: (+) Length of stay (-) Readmissions (-) Institutionalization (-) Mortality (-) Service use
Shyu et al., 2009 PEDro score: 4	4	Caregiver-oriented discharge preparation programme vs.	**At 1, 3, 6 and 12 months post-discharge:** Patients outcomes:

Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		Routine discharge services **Treatment details**: 4-5x 30-minute visits during hospitalisation; 1x 30-45 minute telephone consultation one week following discharge; 2x 30-minute home visits in the month following discharge.	(-) Medical Outcomes Study Short Form (SF-36) (-) Chinese Barthel Index (-) Length of hospital stay (-) Hospital readmissions (+) Institutionalisations Carers outcomes: (-) SF-36* (+) Family Caregiving Consequence Inventory (FCCI) – frail elder outcome subscale** *significant between-group difference in social functioning subtest of SF-36 was seen in favour of control group compared to intervention group at 3 months post-discharge ** significant between-group difference in favour of intervention group compared to control group at 6 months post-discharge.
Suwanwela et al., 2002 PEDro score: 4	4	Early discharge and home care (n=50) vs. Conventional hospitalisation (n=52) **Treatment details**: Early discharge: 3 days hospitalization followed by home care from Red Cross volunteers every second day for 10 days Conventional hospitalisation: 10 days Both groups received Red Cross care at 2 weeks and 1, 3 and 6 months	**At 6 months post-stroke:** (-) National Institute of Health Stroke Scale (-) Barthel Index (-) Patient Satisfaction Process measures: (-) Mortality (-) Dependency

Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
ThorsÃ©n et al., 2005 PEDro score: 6	6 (5 years follow-up measurements of the WidÃ©n Holmqvist et al., 1998 study).	Early supported discharge and home rehabilitation (n=30) vs. Conventional care (n=24)	**At 5 years post-stroke:** Patient outcomes: (-) Barthel ADL Index (-) Katz ADL Index (+) Extended Katz ADL Index (+) Frenchay Activities Index (washing dishes, washing clothes and reading book subscores only) (-) Lindmark Motor Capacity Assessment (-) Nine-Hole Peg Test (-) 10 m walking test (-) Sickness Impact Profile (-) Patient satisfaction (-) Reinvang Aphasia Test (-) Sense of Coherence test (-) Self-reported incidence of falls Carer outcomes: (-) Carer satisfaction Process measures: (-) Mortality (-) Dependency (less than full score on the Barthel Index)
von Koch et al., 2000 PEDro score: 6	6 (6 months follow-up measurements of the WidÃ©n Holmqvist et al., 1998 study)	Early supported discharge and home rehabilitation (n=40) vs. Conventional care (n=38) **Treatment details**:	**At 6 months post-stroke:** Patient outcomes: (+) Barthel ADL Index (mobility subscore only) (-) Katz ADL Index (-) Extended Katz ADL Index

Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		Early supported discharge: case-manager coordinated discharge and home-based rehabilitation (occupational, physical and speech therapy) using a task- and context-oriented approach, and education/counselling for the spouse, for 3-4 months. Conventional care: continued inpatient and outpatient rehabilitation in hospital or rehabilitation center.	(+) Frenchay Activities Index (washing subscore only) (+) Lindmark Motor Capacity Assessment (-) Nine Hole Peg Test (-) 10m walking test (+) Sickness Impact Profile (communication subscore only) (-) Patient satisfaction (+) Reinvang Aphasia Test (literal paraphasia subscore only)* (-) Sense of Coherence (SOC) test (-) Self-reported incidence of falls Carer outcomes: (-) Carer satisfaction Process measures: (-) Length of stay (-) Mortality (-) Service use * favoring conventional care group
von Koch et al., 2001 PEDro score: 5	5 (1 year follow-up measurements of the WidÃ©n Holmqvist et al., 1998 study)	Early supported discharge and home rehabilitation (n=39) vs. Conventional care (n=38) **Treatment details**: Early supported discharge: case-manager coordinated discharge and home-based rehabilitation (occupational, physical and speech therapy) using a task- and context-	**At 12 months post-stroke**: Patient outcomes: (-) Barthel ADL Index (-) Katz ADL Index (-) Extended Katz ADL Index (-) Frenchay Activities Index (-) Lindmark Motor Capacity Assessment (-) Nine-Hole Peg Test

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		oriented approach, and education/counselling for the spouse, for 3-4 months. Conventional care: continued inpatient and outpatient rehabilitation in hospital or rehabilitation center.	(-) 10 m walking test (-) Sickness Impact Profile (-) Patient satisfaction (-) Reinvang Aphasia Test (-) Sense of Coherence test (-) Self-reported incidence of falls Carer outcomes: (-) Carer satisfaction (-) Sickness Impact Profile Process measures: (-) Mortality (-) Dependency (less than full score on the Barthel Index) (+) Length of stay (+) Resource use (nurses in primary care, home rehabilitation attendances) (+) Resource use (outpatient occupational therapy, private physical therapy, day-hospital attendances)* (-) Comparison of cost of health care * Results in favour of conventional care compared to early supported discharge.
WidÃ©n Holmqvist et al., 1998 PEDro score: 7	7	Early supported discharge and home rehabilitation (n=42) vs. Conventional care (n=41) **Treatment details**:	**At 3 months post-stroke:** Patient outcomes: (-) Barthel ADL Index (-) Katz ADL Index (-) Extended Katz ADL Index

Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		Early supported discharge: case-manager coordinated discharge and home-based rehabilitation (occupational, physical and speech therapy) using a task- and context-oriented approach, and education/counselling for the spouse, for 3-4 months. Conventional care: continued inpatient and outpatient rehabilitation in hospital or rehabilitation center.	(-) Frenchay Activities Index (+) Lindmark Motor Capacity Assessment (coordination subtest only) (-) Nine-Hole Peg Test (-) 10 m walking test (+) Sickness Impact Profile (Psychological dimension, emotional behaviour subtest and communication subtest)* (-) Patient satisfaction (-) Aphasia Quotient (-) Self-reported incidence of falls Carer outcomes: (-) Carer satisfaction (-) Quality of life (time spent helping patient) Process measures: (+) Length of stay (-) Mortality (-) Dependency (-) Service use * significant between-group differences favoring the conventional rehabilitation group.
Ytterberg et al., 2010 PEDro score: 3	3 (5 years follow-up measurements of the WidÃ©n Holmqvist et al., 1998 study)	Early supported discharge and home rehabilitation (n=28) vs. Conventional care (n=22) **Treatment details**:	**At 5 years post-stroke:** (+) Sickness Impact Profile (Eating only)

Early supported discharge

Author, Year PEDro Score, Country	Sample size	Intervention	Outcome and significance: (+) significant (-) not significant
		Early supported discharge: case-manager coordinated discharge and home-based rehabilitation (occupational, physical and speech therapy) using a task- and context-oriented approach, and education/counselling for the spouse, for 3-4 months. Conventional care: continued inpatient and outpatient rehabilitation in hospital or rehabilitation center.	