National Institute for Health and Care Excellence

Draft for consultation

Rehabilitation after traumatic injury

B.3 Psychological and psychosocial interventions for people with complex rehabilitation needs after traumatic injury

NICE guideline <number>

Evidence review underpinning recommendations 1.1.3, 1.2.20, 1.2.21, 1.5.1, 1.5.4, 1.5.7, 1.9.3, 1.13.1, 1.13.2, 1.13.3, 1.13.4, 1.13.5, 1.13.6 and 1.13.7 and research recommendations in the NICE guideline

July 2021

Draft for consultation

These evidence reviews were developed by the National Guideline Alliance which is a part of the Royal College of Obstetricians and Gynaecologists



Disclaimer

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the <u>Welsh Government</u>, <u>Scottish Government</u>, and <u>Northern Ireland Executive</u>. All NICE guidance is subject to regular review and may be updated or withdrawn.

Copyright

© NICE 2021. All rights reserved. Subject to Notice of Rights.

ISBN:

Contents_Toc72434533

Summai	ry of re	view questions covered in this report	7
		and psychosocial rehabilitation interventions for people with habilitation needs after traumatic injury	Q
	-	stion	
T(evi	•	uction	
		nary of the protocol	-
		bds and process	
		al evidence: Adults	
		nary of studies included in the evidence review	
		ts and quality assessment of clinical outcomes included in the evidence review	
	Clinica	al evidence: Children and young people	21
		nary of studies included in the evidence review	
		ts and quality assessment of clinical outcomes included in the evidence review	
	Econo	omic evidence: Adults and children and young people	23
	Summ	nary of studies included in the economic evidence reviews	23
	Econo	omic model	23
	The c	ommittee's discussion of the evidence	23
	Refere	ences	28
Append	ices		30
App	endix A	– Review protocols	30
	Revie	w protocol for review question: What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	30
	Revie	w protocol for review question: What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	26
٨٥٥	ondiv D	– Literature search strategies	
Арр		ture search strategies for review questions:	
	B.3a	What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	
	B.3b	What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?)	
	Revie	w question search strategies	44
	Datab	ases: Medline; Medline EPub Ahead of Print; and Medline In-Process & Other Non-Indexed Citations	44
	Datab	ases: Embase; and Embase Classic	46
	Datab	ases: Cochrane Central Register of Controlled Trials; and Cochrane	

	Database of Systematic Reviews	49
Databa	ases: Psycinfo	51
Health	economics search strategies	53
Databa	ases: Medline; Medline EPub Ahead of Print; and Medline In-Process & Other Non-Indexed Citations	53
Databa	ases: Embase; and Embase Classic	56
Databa	ase: Cochrane Central Register of Controlled Trials	59
Appendix C	 Clinical evidence study selection 	62
Clinica	I study selection for review questions:	62
B.3a	What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	62
B.3b	What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?)	62
Appendix D	- Clinical evidence tables	64
Clinica	I evidence tables for review question: B.3a What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	64
Clinica	al evidence tables for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	129
Appendix E	– Forest plots	134
Forest	plots for review question: B.3a What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	134
Forest	plots for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic	
	injury?	134
	– GRADE tables	135
GRAD	E tables for review question: B.3a What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	135
GRAD	E tables for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	150
Appendix G	– Economic evidence study selection	
	mic study selection for review questions:	
B.3a	What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	
B.3b	What psychological and psychosocial rehabilitation interventions are	

Appe	ndix H	– Economic evidence tables	154
	Econo	mic evidence tables for review question: B.3a What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	154
	Econo	mic evidence tables for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	154
Appe	ndix I –	Economic evidence profiles	155
	Econo	mic evidence profiles for review question: B.3a What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	155
	Econo	mic evidence profiles for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	155
Appe	ndix J -	- Economic analysis	156
	Econo	mic evidence analysis for review question: B.3a What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	
	Econo	mic evidence analysis for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	
Δnne	ndiv K .	- Excluded studies	
Appe		ed clinical and economic studies for review question: B.3a What	107
	LXCIUU	psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?	157
	Exclud	ed studies for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	181
Appe	ndix L -	- Research recommendations	
		rch recommendations for review questions:	
	B.3a	What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs	
		after traumatic injury?	207
	B.3b	What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?	207

Summary of review questions covered in this report

- 3 This evidence report contains information on 2 reviews
- B.3a What psychological and psychosocial rehabilitation interventions are effective and
 acceptable for adults with complex rehabilitation needs after traumatic injury?
- B.3b What psychological and psychosocial rehabilitation interventions are effective and
 acceptable for children and young people with complex rehabilitation needs after
 traumatic injury?

Psychological and psychosocial

2 rehabilitation interventions for people with

3 complex rehabilitation needs after

4 traumatic injury

5 Review question

- 6 This evidence report contains information on 2 reviews
- B.3a What psychological and psychosocial rehabilitation interventions are effective and
 acceptable for adults with complex rehabilitation needs after traumatic injury?

B.3b What psychological and psychosocial rehabilitation interventions are effective and
 acceptable for children and young people with complex rehabilitation needs after
 traumatic injury?

12 Introduction

13 Trauma causes disruption to daily life, routines and relationships as well as causing pain,

14 uncertainty about recovery or potential disability and financial pressures due to loss of

15 income. Changes to mood and emotional functioning are common in the initial period after

16 injury and often impact on the ability to fully recover. Later, these features may predominate,

- 17 as the impact of injury becomes more apparent and continued lack of participation in usual
- 18 activities and society leads to low mood and social isolation.

19 Providing support for psychological needs after trauma is an essential part of the

20 rehabilitation process. Often services for these issues are provided in a disjointed and

21 haphazard way (depending on local commissioning arrangements), which do not meet the

22 needs of the trauma survivor population. Standardisation of this part of the care pathway

23 would enhance patients' recovery.

24 The objective of this review was to examine what psychological and psychosocial

rehabilitation interventions are effective and acceptable for people with complex rehabilitation needs after traumatic injury.

27 Summary of the protocol

28 Please see Table 1 and Table 2 for a summary of the Population, Intervention, Comparison

and Outcome (PICO) characteristics of this review in the adult and children and young

30 people populations, respectively.

31 Table 1: Summary of the adult protocol (PICO table)

Population	Adults (aged 18 years or above) with complex rehabilitation needs resulting from traumatic injury that required admission to hospital			
Intervention	Standard rehabilitation care consisting of: physiotherapy [range of movement exercises, exercises to maintain muscle function, mobilisation and training with mobilisation aids such as crutches or frame], occupational therapy assessment, and identification and support of basic activities of daily living through training or aids (e.g. toileting equipment, perching stools, long-handled aids, adapted eating utensils) in addition to at least one of the following:			
	 Cosmetic interventions for trauma induced changes to the body e.g. skin camouflage, tattooing) 			

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Comparison 1) Standard rehabilitation care (as defined above) 2) Studies that employ the same intervention program as listed under 'interventions' but vary it in terms of any of the following: • Frequency • Intensity • Timing Outcome • Critical • Overall quality of life [EURO-QoL 5D 3L, SF-36, SF-12, SF-6D, SFMA] • Patient acceptability (any direct measure) • Changes in mood [Depression measures - BDI, DAS, HADS, PHQ-9] • Important • Return to work or education • Changes in activity of daily living [Barthel ADL index, COPM, E-ADL-Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] • Pain (e.g. VAS)		 Psychological therapies for adjustment and engagement (Compassionate mind therapy, Acceptance and commitment therapy, Mindfulness, Visualisation or 'mentalisation' to support physical rehab, Relaxation [progressive, or breathing based, or other], Cognitive behavioural therapy) Family support (including education, advice, signposting to useful agencies such as Citizens advice) Self-management interventions (i.e., education to understand how one might be affected by fatigue, depression, Bridges Self-management, conversation with consultant etc.) Person-centred goal setting (including motivational interviewing)
2) Studies that employ the same intervention program as listed under 'interventions' but vary it in terms of any of the following: • Frequency • Intensity • Timing Outcome • Critical • Overall quality of life [EURO-QoL 5D 3L, SF-36, SF-12, SF-6D, SFMA] • Patient acceptability (any direct measure) • Changes in mood [Depression measures - BDI, DAS, HADS, PHQ-9] • Important • Return to work or education • Changes in activity of daily living [Barthel ADL index, COPM, E-ADL-Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] • Pain (e.g. VAS)	Comparison	
 Overall quality of life [EURO-QoL 5D 3L, SF-36, SF-12, SF-6D, SFMA] Patient acceptability (any direct measure) Changes in mood [Depression measures - BDI, DAS, HADS, PHQ-9] Important Return to work or education Changes in activity of daily living [Barthel ADL index, COPM, E-ADL-Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] Pain (e.g. VAS) 		2) Studies that employ the same intervention program as listed under 'interventions' but vary it in terms of any of the following:FrequencyIntensity
 Patient acceptability (any direct measure) Changes in mood [Depression measures - BDI, DAS, HADS, PHQ-9] Important Return to work or education Changes in activity of daily living [Barthel ADL index, COPM, E-ADL-Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] Pain (e.g. VAS) 	Outcome	
 Changes in mood [Depression measures - BDI, DAS, HADS, PHQ-9] Important Return to work or education Changes in activity of daily living [Barthel ADL index, COPM, E-ADL-Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] Pain (e.g. VAS) 		
 Important Return to work or education Changes in activity of daily living [Barthel ADL index, COPM, E-ADL-Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] Pain (e.g. VAS) 		
 Return to work or education Changes in activity of daily living [Barthel ADL index, COPM, E-ADL-Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] Pain (e.g. VAS) 		
 Changes in activity of daily living [Barthel ADL index, COPM, E-ADL- Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] Pain (e.g. VAS) 		
Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,] ○ Pain (e.g. VAS)		
		Test, FIMFAM, GAS, Katz, OARS, PAT, PSMS,]
ADL: Activities of daily living; BDI: Beck depression inventory; CHQ CF-80: 80 item child health questionnaire;	ADL : Activities of daily living:	

ADL: Activities of daily living; BDI: Beck depression inventory; CHQ CF-80: 80 item child health questionnaire;
 CHQ PF-50: 50 item child health questionnaire, parent completed; COPM: Canadian occupational performance
 measure; DARE: DAS: Disability assessment schedule; E-ADL-Test: Erlangen Activities of Daily Living test;
 EURO-QoL 5D 3L: EuroQol 5 dimensions and 3 levels; FIMFAM: Functional independence measure and
 functional assessment measure; GAS: Goal attainment scaling; HADS: Hospital anxiety and depression scale;
 OARS: Older Americans resources and services; PAT: Performance ADL test; PHQ-9: 9 item patient health
 questionnaire; PSMS: Physical self-maintenance scale; SCIM: Spinal cord independence measure; SFMA:
 Selective functional movement assessment; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey;
 SF-6D: 6-dimension short-form; VAS: Visual; analogue scale

10 **Table 2:** Summary of the children and young people protocol (PICO table)

Population	Children and young people (aged below 18 years) with complex rehabilitation needs resulting from traumatic injury that required admission to hospital
Intervention	Standard rehabilitation care consisting of: physiotherapy [range of movement exercises, exercises to maintain muscle function, mobilisation and training with mobilisation aids such as crutches or frame], occupational therapy assessment, and identification and support of basic activities of daily living through training or aids (e.g. toileting equipment, perching stools, long-handled aids, adapted eating utensils) in addition to at least one of the following:
	 Cosmetic interventions for trauma induced changes to the body e.g. skin camouflage, tattooing)
	 Psychological therapies for adjustment and engagement (Compassionate mind therapy, Acceptance and commitment therapy, Mindfulness, Visualisation or 'mentalisation' to support physical rehab, Relaxation [progressive, or breathing based, or other], Cognitive behavioural therapy)
	 Family support (including education, advice, signposting to useful

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

agencies such as Citizens advice or Changing Faces)
• Self-management interventions (i.e., education to understand how one might be affected by fatigue, depression, Bridges Self-management, conversation with consultant etc.)
 Person-centred goal setting (including motivational interviewing)
Play therapy
 Family therapy (including sibling support)
 Interventions for adaptive dysfunction and behavioural disturbance
1) Standard rehabilitation care (as defined above)
 Studies that employ the same intervention program as listed under 'interventions' but vary it in terms of any of the following:
Frequency
Intensity
Timing
Critical
 Overall quality of life including quality of sleep [e.g., CHQ CF-80, CHQ PF-50, EURO-QoL 5D 3L Y, PEDS-QL, SCIM, SF-36, SF-12, SF-6D, Tarn]
 Patient, families and carers' acceptability
 Changes in mood [including PEDS-QL, Depression measures - BDI, DAS, HADS, PHQ-9,]
∘ Changes in mood [including PEDS-QL, Depression measures - BDI,
 Changes in mood [including PEDS-QL, Depression measures - BDI, DAS, HADS, PHQ-9,]
 Changes in mood [including PEDS-QL, Depression measures - BDI, DAS, HADS, PHQ-9,] [Babies only:
 Changes in mood [including PEDS-QL, Depression measures - BDI, DAS, HADS, PHQ-9,] [Babies only: Alberta Infant Motor Scale (AIMS; pre-term to 19 months)
 Changes in mood [including PEDS-QL, Depression measures - BDI, DAS, HADS, PHQ-9,] [Babies only: Alberta Infant Motor Scale (AIMS; pre-term to 19 months) Bayley Assessment (1 to 42 months)] Important Return to nursery, education, training or work
 Changes in mood [including PEDS-QL, Depression measures - BDI, DAS, HADS, PHQ-9,] [Babies only: Alberta Infant Motor Scale (AIMS; pre-term to 19 months) Bayley Assessment (1 to 42 months)] Important
 Changes in mood [including PEDS-QL, Depression measures - BDI, DAS, HADS, PHQ-9,] [Babies only: Alberta Infant Motor Scale (AIMS; pre-term to 19 months) Bayley Assessment (1 to 42 months)] Important Return to nursery, education, training or work Changes in activity of daily living [e.g., Barthel ADL index, COPM, E-

ADL: Activities of daily living; BDI: Beck depression inventory; CHQ CF-80: 80 item child health questionnaire;
CHQ PF-50: 50 item child health questionnaire, parent completed; COPM: Canadian occupational performance
measure; DAS: Disability assessment schedule; E-ADL-Test: Erlangen Activities of Daily Living test; EURO-QoL
5D 3L: EuroQol 5 dimensions and 3 levels; FIMFAM: Functional independence measure and functional
assessment measure; GAS: Goal attainment scaling; HADS: Hospital anxiety and depression scale; OARS: Older
Americans resources and services; PAT: Performance ADL test; PEDS-QL: Paediatric quality of life inventory;
PHQ-9: 9 item patient health questionnaire; PSMS: Physical self-maintenance scale; SCIM: Spinal cord
independence measure; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey; SF-6D: 6-dimension

10 For further details see the review protocol in appendix A.

11 Methods and process

- 12 This evidence review was developed using the methods and process described in
- 13 <u>Developing NICE guidelines: the manual</u>. Methods specific to this review question are
- 14 described in the review protocol in appendix A and in the methods chapter (Supplement 1).
- 15 Declarations of interest were recorded according to NICE's 2018 conflicts of interest policy.

1 Clinical evidence: Adults

2 Included studies

Sixteen studies were included in this review. Fifteen of these were randomised controlled
trials (RCTs; Allegrante 2007, Coker 2019; Elinge 2003, Holmes 2007, Kooijmans 2017,
Mercier 2015, Migliorini 2016, Mohaddes Ardebili 2017, Nooijen 2016a, Nooijen 2016b,
Nooijen 2017, Pirente 2007, Schulz 2009, Wiechman 2015 and Zidén 2008). One study was
a non-randomised cohort study (Castillo 2013). Due to the variety of the interventions
identified and trauma populations, it was decided to include non-randomised trials to
increase the amount of evidence where possible.

10 The included studies are summarised in Table 3.

11 Six were from the United States (Allegrante 2007, Castillo 2013, Coker 2019, Mercier 2015,

12 Schulz 2009 and Wiechman 2015); 4 were from The Netherlands (Kooijmans 2017, Nooijen

13 2016a, Nooijen 2016b and Nooijen 2017); 2 were from Sweden (Elinge 2003 and Zidén

14 2008); 2 were from Australia (Holes 2007 and Migliorini 2016); 1 was from Iran (Mohaddes

15 Ardebili 2017); and 1 was from Germany (Pirente 2007).

16 These included studies examined the following comparisons:

17 **Psychological therapies for adjustment and engagement**

Five studies investigated psychological therapies for adjustment and engagement. One RCT 18 compared the effectiveness of standard care plus a post-operative motivational intervention 19 20 with standard post-operative care and rehabilitation (Allegrante 2007). One RCT compared the effectiveness of interpersonal counselling with standard care (Holmes 2007). Another 21 22 RCT compared the effectiveness of a scheduled, automated peer support telephone call 23 service and resource book with standard care and resource book (Mercier 2015). Another RCT compared the effectiveness of an online-based CBT schedule with a waitlist control 24 25 (Migliorini 2016). The final RCT compared the effectiveness of standard care and a CBTbased psychotherapy intervention with standard care alone (Pirente 2007). 26

27 Family support

One RCT compared the effectiveness of educational sessions and telephone-based group
 support sessions for caregivers of individuals with spinal cord injury (SCI) with a written
 information pack and telephone contact (Schulz 2009).

31 Self-management interventions

32 Five studies investigated the use of self-management interventions in adults with complex 33 rehabilitation needs. One cohort study investigated the effectiveness of standard care plus access to a Trauma Support Network compared to standard care alone (Castillo 2013). One 34 RCT compared the effectiveness of an educationally-based group therapy programme with a 35 waitlist control (Coker 2019). One RCT compared the effectiveness of a small-group learning 36 programme and home-training schedule with standard care and rehabilitation (Elinge 2003). 37 Another study compared the effectiveness of an active behaviour intervention programme 38 39 (Healthy Active Behavioural Intervention in SCI) and information booklet with a single 40 information meeting and information booklet (Kooijmans 2017). The last RCT compared the effectiveness of a motivational self-care CD and routine self-care information in burn patients 41 42 with routine self-care information alone (Mohaddes Ardebili 2017).

1 Person-centred goal setting

- 2 Five studies investigated the use of person-centred goal setting, all focusing on motivational
- 3 interviewing. Three papers reported on the Act Active study, which measured the
- 4 effectiveness of a motivational interviewing intervention in wheelchair users with SCI,
- 5 compared with standard care (Nooijen 2016a, Nooijen 2016b and Nooijen 2017). Another
- 6 RCT compared the effectiveness in burn patients of motivational interviewing plus standard
- 7 outpatient care with standard outpatient care alone (Wiechman 2015). The final RCT
- 8 compared standard care and rehabilitation plus supported discharge (including a motivational
- 9 interviewing component) with standard care and rehabilitation alone (Zidén 2008).
- 10 See the literature search strategy in appendix B and study selection flow chart in appendix C.

11 Excluded studies

Studies not included in this review are listed with the reasons for their exclusion in appendixK.

14 Summary of studies included in the evidence review

15 Summaries of the studies that were included in this review are presented in Table 3.

16 **Table 3: Summary of included studies**

Table 5. Sull	Table 3: Summary of Included studies					
Study	Population	Intervention ^a	Control ^a	Outcomes		
Study Allegrante 2007 RCT USA	Population N= 176 Participants with primary unilateral fracture of the hip with a subsequent successful surgical repair. Age in years [Mean (SD)]: • Motivation and support = 78	Intervention ^a Standard care plus intervention programme consisting of a post- operative motivational videotape, in-hospital support visit from a peer-counsellor, and a tailored outpatient physical therapy.	Control ^a Standard post- operative care and rehabilitation services offered by hospital and supportive telephone contact.	 Outcomes Critical Overall quality of life (at 6 months) Important Pain (at 6 months) 		
	 support = 78 (7) Standard post- operative care = 77 (8) Gender (M/F): Motivation and support (N): 8/24 					
	• Standard post- operative care (N): 6/21					
Castillo 2013 Prospective and retrospective cohort study	N= 251 Participants sustained one or more extremity injuries with no	Standard care plus access to Trauma Support Network. This programme integrates 4 supportive aspects of	Standard care.	 Critical Overall quality of life (at 6 months) Changes in 		

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Population	Intervention ^a	Control ^a	Outcomes
USA	serious brain injury. Age in years [Mean (SD)]: • Trauma Support Network = 36.9 (14.1) • Standard care = 38.0 (12.5) Gender (M/F): • Trauma Support Network (N): 95/31 • Standard care (N): 44/81	peer-support, self- management, information and resources, and provider training.		mood (at 6 months) ● Important ○ None
Coker 2019 RCT USA	N=81 People with traumatic or non-traumatic SCI at any level Age in years [Mean (SD)]: • Therapeutic intervention programme: 48.0 (12.8) • Waitlist control: 52.0 (15.3) Gender (M/F): • Therapeutic intervention programme (N): 34/7 • Waitlist control (N): 32/8	Educationally-based group therapeutic programme consisting of weekly 2 hour sessions, for 6 weeks. Skills were aims at acceptance of injury and building confidence.	Waitlist control	 Critical Changes in mood (at 6 weeks; 24 weeks) Important None
Elinge 2003 RCT Sweden	N= 43 Patients with hip or vertebral fracture. Age in years [Mean (SD)]: • Small group learning = 73.1 (7.3) • Standard care and rehab =	Small group learning programme consisting of multi- disciplinary lectures, as well as individually tailored home-training schedule.	Standard care and rehabilitation.	 Critical None Important Changes in ADL (at intervention completion)

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Population	Intervention ^a	Control ^a	Outcomes
	 73.8 (11.1) Gender (M/F): Small group learning (N): 5/16 Standard care and rehab (N): 3/11 			
Holmes 2007 RCT Australia	N= 90 Patients with major physical trauma without major head injury. Age in years [Mean (SD)]: Interpersonal counselling = 39.9 (15.8) Standard care = 36.4 (14.8) Gender (M/F): Interpersonal counselling (N): 36/15 Standard care (N): 27/12	Interpersonal counselling for initial 3 months following trauma. Sessions included identifying the impact of trauma, grief, loss and strategies for adaptation.	Standard care included non-specific psychological support.	 Critical Changes in mood (at 3 months; 6 months) Important None
Kooijmans 2017 RCT The Netherlands	N= 64 Physically inactive participants with chronic SCI, able to use a hand-rim wheelchair. Age in years [Mean (SD)]: • HABITS = 48 (10) • Single meeting control = 49 (11) Gender (M/F): • HABITS (N): 21/12 • Single meeting	Healthy Active Behavioural Intervention in SCI (HABITS) programme involving a home visit and 5 group sessions over 16 weeks, plus an information booklet. Designed to facilitate an active lifestyle and increase self- management.	One group meeting providing information on maintaining an active lifestyle with SCI plus an information booklet.	 Critical Overall quality of life Important Changes in ADL

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study I	Population		Control ^a	Outcomes
	control (N):	Intervention ^a		
RCT I	24/7 N= 142 Participants with spinal cord dysfunction and using a wheelchair for at least 6 hours a day.	CareCall – 6 months of scheduled, automated telephone calls designed to deliver educational content, peer support and clinical expertise, as well as CareCall resource book.	Standard care plus CareCall resource book.	 Critical Changes in mood (at 6 months) Important Changes in ADL (at 6 months)
	Age in years [Mean (SD)]: • CareCall = 45.8 (12.1) • Standard care and resource book = 45.0 (14.0) Gender (M/F): • CareCall (N): 42/11 • Standard care and resource book (N): 34/19			
2016 RCT Australia	N=59 Participants with SCI, more than 6 months after trauma and with symptoms of depression. Age in years [Mean (SD)]: • Psycho- educational programme: 47.5 (12.2) • Waitlist control: 52.8 (12.9) Gender (M/F): • Psycho- educational programme (N): 25/9 • Waitlist control Control (N):	Psycho-educational programme based on CBT, lasting 10 sessions (10 min – 1 hour duration)	Waitlist control	 Critical Changes in mood (at 10-12 weeks) Important None
Mohaddes I	17/8 N= 100	Individually delivered	Individually delivered	Critical

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Population	Intervention ^a	Control ^a	Outcomes
Ardebili 2017 RCT	Burn patients Age in years (18-28/29- 38/39-48/49-58): Multimedia self-care education (N) = 11/15/17/7 Self-care recommendati on (N) = 10/22/14/6 Gender (M/F): Multi-media self-care education (N): 23/28* Self-care recommendati on (N): 22/28 * Adds up to 51, double checked reported figures.	routine self-care recommendation plus a burn patient self-care CD, educational books and information resources.	routine self-care recommendation	 Overall quality of life (at 3 months) Important None
Nooijen 2016a RCT The Netherlands	N= 45 Individuals with SCI who have already undergone inpatient rehabilitation	A motivational interviewing intervention given during 13 individual sessions. The intervention consisted of feedback on daily	Standard care, including a handcycle training programme and advice on physical activity post- discharge.	 Critical None Important Changes in ADL (at discharge; 6 months; 12 months)
Nooijen 2016b RCT The Netherlands	 and dependent on a manual wheelchair. Age in years [Mean (SD)]: Motivational interviewing = 44 (15) Standard care = 44 (15) 	wheelchair activity from bicycle odometers, planning of when and how to be physically active, a home visit to optimise the home environment and provision of helpful information.		 Critical Changes in mood (at discharge; 6 months; 12 months) Important Pain (at discharge; 6 months; 12 months)
Nooijen 2017 RCT The Netherlands	Gender (M/F): • Motivational interviewing (N): 17/3 • Standard care (N): 16/3			 Critical Overall quality of life (at discharge; 6 months; 12 months) Important None

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Population	Intervention ^a	Control ^a	Outcomes
Pirente 2007 RCT Germany	N= 171 People with at least 2 recent traumatic injuries. Age in years [Mean (range)]: • CBT-based psychotherapy = 39 (18-69) • Standard care = 38 (21-65) Gender (M/F): • CBT-based psychotherapy (N): 28/17 • Standard care (N): 37/10	Standard care with a CBT-based psychotherapy intervention.	Standard care	 Critical Overall quality of life (at 6 months) Changes in mood (at 6 months; 12 months) Important None
Schulz 2009 RCT USA	N= 173 caregiver/care recipient dyads Individuals with impaired mobility due to an SCI and their caregivers. Age in years [Mean (SD)]: <i>Caregivers</i> • Dual target = 50.7 (14.3) • Caregiver only = 53.7 (14.3) • Writen information = 53.4 (15.8) <i>Care recipients</i> • Dual target = 53.4 (12.7) • Caregiver only = 57.7 (12.5) • Written information = 54.4 (13.2) Gender (M/F): Caregivers • Dual target (N): 9/48	Caregiver only Seven individual education sessions for caregivers of people with SCI, focusing on cognitive skills to reduce stress and improve mental and physical health. Also received increased access to support resources, and 5 additional telephone-based group support sessions. Dual target intervention Caregiver portion of intervention as described above as well as 7 individual education sessions delivered to SCI care recipients, focusing on SCI knowledge and cognitive skills to reduce stress and improve mental and physical health. Also received increased access to support resources, and 5 additional telephone- based group support	Written pack containing information SCI and caregiving, as well as 3 telephone contacts during study period.	 Critical Overall quality of life (at 12 months) Changes in mood (at 12 months) Important None

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	Population	Intervention ^a	Control ^a	Outcomes
	 Caregiver only (N): 14/42 Written information (N): 19/41 Care recipients Dual target (N): 41/16 Caregiver only (N): 18/38 Written information (N): 27/33 	sessions.		
Wiechman 2015 RCT USA	N= 81 Participants undergoing outpatient rehabilitation for burns either: greater than 15% body area, less than 15% body area requiring surgical closure or less than 15% body area and located on face, hands or over a joint. Age in years [Mean (SD)]: • Moitvational interviewing = 43.23 (16.92) • Standard care = 43.68 (17.13) Gender (M/F): • Motivational interviewing (N): 25/15 • Standard care (N): 29/12	Motivational interviewing plus standard outpatient care from clinic. Participants were contacted 8 times throughout the study by an expanded care coordinator. Each call reviewed medical and psychological issues, as well as participant goals and progress towards them.	Standard outpatient care from burn clinic, involving a multi- disciplinary team of nurse, surgeon, physical and occupational therapist, vocational counsellor and psychologist.	 Critical Overall quality of life (at 6 months; 12 months) Patient acceptability (at 6 months; 12 months) Important Changes in ADL (at 6 months; 12 months)
Zidén 2008 RCT	N= 212 Individuals after	Standard care and rehabilitation, plus support discharge for home rehabilitation.	Standard care and rehabilitation, consisting of training for everyday tasks	 Critical None Important
Sweden	acute hip fracture surgery. Age in years [Mean (SD)]:	Patients were offered a tailored rehabilitation programme while in	for everyday tasks, transfer techniques, training with technical aids and stair walking. Group-	 Changes in ADL (at 1 month)

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Population	Intervention ^a	Control ^a	Outcomes
	 Supported discharge = 81.2 (5.9) Standard care and rehab = 82.5 (7.6) Gender (M/F): Supported discharge (N): 19/29 Standard care and rehab (N): 12/42 	hospital, as well as increased support and prior planning of discharge. Home rehabilitation included a motivational interviewing component to increase a patient's motivation and self- efficacy.	based physiotherapy and occupational therapy training sessions were also provided.	

1 CBT: cognitive behavioural therapy; F: female; M: male; N: number; RCT: randomised controlled trial; SCI: spinal 2 3 cord injury; SD: standard deviation

(a) For full details about the intervention/comparison, please see the evidence tables in Appendix D

See the full evidence tables in appendix D. No meta-analysis was conducted (and so there 4

5 are no forest plots in appendix E).

6 Results and quality assessment of clinical outcomes included in the evidence 7 review

8 Summary of the evidence

9 No meta-analyses were performed as the interventions or outcomes were either not

10 sufficiently similar to allow them to be combined or they were not reported by more than one

11 study.

12 No evidence was found about cosmetic interventions for trauma-induced changes to the 13 body.

14 Included evidence showed:

15 Psychological therapies for adjustment and engagement

16 One study investigated a motivational intervention versus standard post-operative care (Allegrante 2007). At 6 months, no statistically or clinically important differences were found 17 18 between the groups in physical functioning (low quality evidence), general health (very low quality evidence), mental health (very low quality evidence) and pain (very low quality 19 20 evidence). One study investigated an interpersonal counselling intervention versus standard care (Holmes 2007) and found no clinically important differences between the groups in 21 22 depression or anxiety at 3 or 6 months (all very low quality evidence). One study investigated 23 a peer support telephone call service versus standard care (Mercier 2015) and measured 24 depression and physical independence at 6 months' follow-up. No clinically important 25 differences were found between the groups for either outcome (low quality evidence for 26 depression, moderate quality evidence for physical independence). One RCT (Migliorini 2016) did not find any differences in levels of anxiety or depression between people receiving 27 on-line based CBT and waitlist controls at intervention completion (10-12 weeks from 28 baseline) (very low quality evidence). The final study compared the effectiveness of CBT-29 30 based psychotherapy versus standard care (Pirente 2007) and measured health related quality of life, depression and anxiety in participants at 6 months' post trauma, as well as 31 depression and anxiety at 12 months' post trauma. No clinically important differences were 32 found between the 2 groups for overall guality of life or depression and anxiety (as measured 33 34 by STAI, all very low quality evidence). However, anxiety measured using SSCS5 was

statically significantly, but not clinically importantly, higher (worse) in the group receiving the
 CBT-psychotherapy at both 6 and 12 months (very low quality evidence).

3 Family support

4 One study was a three-arm RCT comparing the following three interventions: 1) a caregiver 5 only education and group telephone support intervention, 2) a dual target caregiver and care-6 recipient education and group telephone support intervention, and 3) a written information 7 pack (Schulz 2009). No clinically important differences between groups were found in health 8 symptoms, social integration and depression at 12 months' follow-up between the caregiver 9 only education and support group and the written information only group (low quality evidence). Additionally, no clinically important difference was found between the dual target 10 intervention group and control groups for depression at 12 months' follow-up (low quality 11 12 evidence). Health symptoms were statistically significantly, but not clinically importantly, 13 lower (better) in dual target group when compared to the information only group at 12 14 months' follow-up, while social integration at 12 months' follow-up was both statistically 15 significantly and clinically importantly lower (worse) in the dual target intervention group (both 16 low quality evidence).

17 Self-management interventions

18 One cohort study investigated the effect of a Trauma Support Network programme compared to historical standard care (Castillo 2013). No clinically important differences were found 19 20 between the two groups in mental component scores (SF-12), physical component score 21 (SF-12) or anxiety at 6 months from baseline (low quality evidence). However, there was a statistically significantly, but not clinically importantly, lower (better) depression score in the 22 23 Trauma Support Network group when compared to the control group at 6 months following 24 baseline (very low quality evidence). One RCT (Coker 2019) did not find any differences in 25 mood (measured using the Patient Health Questionnaire) between people receiving an 'Educationally-based group therapeutic programme' and 'Waitlist controls' after intervention 26 27 completion and at 24 weeks follow-up after intervention completion (both very low quality 28 evidence). One RCT investigated a group learning programme versus standard care (Elinge 29 2003). According to analyses performed by the authors, no statistically significant difference 30 was found for changes in ADL at either intervention completion or 12 months after intervention completion (very low quality evidence). There was a lack of published MIDs and 31 32 the committee were not confident in stating their own, so clinical importance could not be judged. One RCT investigated the effectiveness of the Health Active Behavioural intervention 33 34 in SCI (HABITS) programme versus a single information meeting (Kooijmans 2017). No 35 clinically important difference was found between groups for overall quality of life and 36 changes in ADL at either 16 weeks or 42 weeks following baseline (very low quality 37 evidence). The final study investigated the effectiveness of a multimedia self-care education 38 and information package compared to self-care information only (Mohaddes Ardebili 2017) 39 and found that overall quality of life was statistically significantly and clinically importantly 40 higher (better) in the intervention group compared to the control group at 3 months after 41 intervention completion (low quality evidence).

42 Person-centred goal setting

43 Two RCTs investigated the effectiveness of motivational interviewing compared to standard 44 care (Nooijen 2016a, Wiechman 2015). No clinically important differences were found between groups for any measure of overall quality of life at any time point (moderate to very 45 46 low quality evidence), apart from participation and the mental health component of SF-12. 47 Participation was reported to be statistically significantly and clinically importantly lower 48 (worse) in participants receiving motivational interviewing compared to standard care at 49 discharge (2 months from baseline) (very low quality evidence). Additionally, a statistically 50 significantly, though not clinically importantly, higher (better) mental health score (SF-12) at

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

1 12 months after discharge was reported in participants receiving motivational interviewing 2 when compared to participants receiving standard care (low quality evidence). No clinically 3 important difference was found in patient satisfaction between the groups at 6 months, but a statistically significantly and clinically importantly higher (better) patient satisfaction was 4 found in the motivational interviewing group at 12 months compared to control (both low 5 6 quality evidence). No clinically important differences were found for changes of mood 7 between the groups at 2 months after baseline, 6 months after discharge or 12 months after 8 discharge (very low quality evidence). No clinically important differences were found in goal 9 attainment scores between groups at 6 months (low quality evidence) or 12 months (moderate quality evidence). No clinically important difference was found in wheel physical 10 activity between groups at 2 months after baseline or 12 months (both very low quality 11 12 evidence), but a statistically significantly and clinically importantly higher (better) level of 13 wheel physical activity was found at 6 months in participants receiving motivational interviewing compared to control participants (very low quality evidence). Similarly, self-14 reported activities of daily living (measured using Physical Activity Scale for Individuals with 15 16 Physical Disabilities) were statistically significantly and clinically importantly higher (better) in 17 people receiving motivational interviewing compared to those receiving standard care at 6 and 12 months (both low quality evidence). No clinically important difference was found in 18 levels of pain intensity between groups at 2 months after baseline, or 6 months and 12 19 20 months after discharge (all very low quality evidence). Similarly, no clinically important 21 difference was found in pain disability between groups 6 months after discharge (very low 22 quality evidence). However, a statistically significantly and clinically importantly higher (worse) pain disability score was found in participants receiving motivational interviewing 23 24 compared to standard care at 12 months after discharge (very low quality evidence).

- 25 One RCT investigated the effectiveness of supported discharge plus motivational
- interviewing versus standard care and rehabilitation (Zidén 2008). There was a statistically
 significantly and clinically importantly higher (better) ADL in the motivational interview group
- compared to the standard care group at 1-month follow-up (moderate quality evidence).
- The quality of the evidence was assessed using GRADE. See the evidence profiles in appendix F.

31 Clinical evidence: Children and young people

32 Included studies

- 33 One RCT was found for this review (Maskell 2014). This study examined quality of life in
- child and adolescent burn patients using a skin camouflage intervention (Microskin[™])
- 35 compared to a wait-list control group.
- 36 The included studies are summarised in Table 3.
- 37 See the literature search strategy in appendix B and study selection flow chart in appendix C.

38 Excluded studies

Studies not included in this review are listed, and reasons for their exclusion are provided inappendix K.

41 Summary of studies included in the evidence review

42 Summaries of the studies that were included in this review are presented in Table 4.

43 **Table 4: Summary of included studies.**

	<u>,</u>			
Study	Population	Intervention ^a	Control ^a	Outcomes

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Population	Intervention ^a	Control ^a	Outcomes
Maskell 2014 RCT Australia and New Zealand	N= 63 Children and young people with a post-acute healing stage burn and mature scarring. Age in years [Mean (SD)]: • Skin camouflage = 12.23 (1.97) • Wait-list = 13.31 (2.22) Gender (M/F): • Skin camouflage (N): 11/24 • Wait-list (N): 4/24 Percentage TBSA [Mean (SD)]: • Skin camouflage: 23.53 (19.48) • Wait-list: 21.19 (19.52)	Microskin [™] Skin Camouflage Training for participants, parents and carers in how to apply Microskin [™] and provision of necessary equipment before the start of the study. Participants used the camouflage product for 8 weeks.	Wait-list control	 Critical Overall quality of life (at 8 weeks) Important None

- 1 2 3 F: Female; M: Male; N: Number; RCT: Randomised controlled trial; SD: Standard deviation; TBSA: Total burn
- surface area; TM: Trademark
- (a) For full details about the intervention/comparison, please see the evidence tables in Appendix D

4 See the full evidence tables in appendix D. No meta-analysis was conducted (and so there 5 are no forest plots in appendix E).

6 Results and quality assessment of clinical outcomes included in the evidence review 7

8 Summary of evidence

- 9 No meta-analyses were performed as there was only one study.
- 10 Evidence was found for overall quality of life. No evidence was found for the following predefined clinical outcomes: 11
- 12 Patient, families and carers' acceptability
- 13 Changes in mood
- 14 • Return to nursery, education, training or work
- 15 Changes in ADL
- Pain 16
- 17 Changes in the 'Family Needs Questionnaire' scores

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

- 1 No evidence was found for the following pre-defined interventions:
- Psychological therapies for adjustment and engagement family support
- 3 Self-management interventions
- 4 Person-centred goal setting
- 5 Play therapy
- 6 Family therapy
- 7 Interventions for adaptive dysfunction and behavioural disturbance
- 8 Evidence showed no statistically significant or clinically important difference in overall quality
- 9 of life between participants receiving the Microskin[™] skin camouflage and the wait-list
- 10 control group when measured at 8 weeks (very low quality evidence).
- The quality of the evidence was assessed using GRADE. See the evidence profiles inappendix F.

13 Economic evidence: Adults and children and young people

14 Included studies

- 15 A systematic review of the economic literature was conducted but no economic studies were
- 16 identified which were applicable to these review questions. A single economic search was
- 17 undertaken for adult, and children and young people reviews. Please see the study selection
- 18 flow chart in appendix G.

19 Excluded studies

- 20 Studies not included in these reviews with reasons for their exclusions are provided in
- 21 appendix K.

22 Summary of studies included in the economic evidence reviews

23 No economic evidence was identified which was applicable to these review questions.

24 Economic model

- 25 No economic modelling was undertaken for these reviews because the committee agreed
- 26 that other topics were higher priorities for economic evaluation.

27 The committee's discussion of the evidence

28 Interpreting the evidence

29 The outcomes that matter most

- 30 When selecting the critical and important outcomes, the committee agreed that the outcomes
- 31 needed to be sufficiently generalisable to adequately capture patient-important outcomes for
- the whole adult and child and young people populations, respectively, which they recognised
- are quite large and very heterogeneous.
- 34 For both adults and children and young people, they therefore prioritised overall quality of
- 35 life, patient acceptability (including family or carer) and changes in mood as critical
- 36 outcomes. Overall quality of life was selected as the committee considered that one of the
- 37 main aims of people with traumatic injury would be to achieve similar quality of life as before
- the injury. Patient acceptability was also included as a critical outcome as how acceptable a patient finds the rehabilitation intervention is likely to have a large impact in their compliance.
 - Rehabilitation after traumatic injury: evidence reviews for psychological and psychosocial interventions DRAFT (July 2021)

- 1 Changes in mood was also included as a critical outcome because mood disorders are
- common in people with traumatic injury and this outcome reflects the psychologicalwellbeing.

4 The committee selected return to education or work and changes in ADL as important 5 outcomes, as these outcomes measure the level of functional independence after traumatic injury. Pain was also selected as an important outcome because pain plays a pivotal role in a 6 7 person's compliance with rehabilitation programmes and affects quality of life and the ability to undertake ADL. The committee realised that there are many difficulties in measuring these 8 domains for babies, due to their inability to self-report and the lack of validated measurement 9 tools available. Therefore, 2 early childhood-specific outcomes (Alberta Infant Motor Scale 10 and Bayley Assessment score) were also included as critical outcomes for babies with 11 12 complex rehabilitation needs following trauma. For children and young people, changes in the 'Family Needs Questionnaire' was also considered to be an important outcome, as it 13 measures how reflect how rehabilitation is affecting the family unit as a whole. 14

Evidence was found for 6 of these outcomes: overall quality of life, patient acceptability,
changes in mood, changes in activity of daily living and pain. No evidence was found for
return to work or education.

18 The quality of the evidence

For adults, 13 RCTs and 1 cohort study were included as evidence for psychological and psychosocial rehabilitation interventions. The overall quality of the evidence was assessed using GRADE and ranged from very low to moderate quality, with the majority being very low quality. The main reasons for downgrading the evidence were risk of bias in the study designs (for example, insufficient information provided on randomisation processes and lack of participant blinding), imprecision of the effect size and indirectness (for example, if study population included a mixture of non-traumatic and traumatic injuries).

For children and young people, 1 RCT was included as evidence for psychological and psychosocial rehabilitation interventions. The overall quality of the evidence was assessed using GRADE and was very low quality. The main reasons for downgrading the evidence were risk of bias in the study designs (for example, lack of information on the frequency of intervention and high loss to follow-up) and imprecision of the effect size.

The committee therefore made the recommendations based on a combination of the evidence and their experience and expertise.

33 Benefits and harms

34 The adult evidence review did not identify any evidence on immediate psychological and 35 emotional support for people following traumatic injury. In the committee's experience, healthcare professionals may not feel comfortable in offering emotional and psychological 36 37 support to people following traumatic injury if they are not psychologically trained. However, the committee wanted to highlight that this support is invaluable to people following traumatic 38 39 injury, and can be as simple as listening to concerns. Healthcare professionals should not 40 feel reticent about seeking advice and support from psychology services if needed, which 41 could prevent unnecessary referrals delays in people receiving emotional and psychological 42 support. 43 Psychological management should be included from the start of a person's rehabilitation 44 journey, forming part of the rehabilitation needs assessment. The committee wanted to

45 highlight the risk factors that may be present in a patient's history or background, including

46 past and current psychological symptoms beyond what is expected from an acute stress

47 response. Additionally, the committee discussed several social factors that may affect

- 48 rehabilitation engagement. These factors may change the rehabilitation needs or goals of a
- 49 person, and should be taken into consideration in order to ensure equal treatment of

individuals with traumatic injury. If needed, a referral for a formal psychological assessment
 with a psychologist experienced in physical trauma and rehabilitation can should be made to
 ensure that these pre-identified psychological and psychosocial risk factors are appropriately
 considered during the development of the rehabilitation plan is appropriately developed.

5 The committee discussed the importance of reassuring individuals that an acute stress 6 response is normal following traumatic injury, and that this transient disorder does not 7 necessarily mean that they will require psychological or psychosocial intervention. The 8 committee highlighted common several psychological symptoms that may accompany 9 ongoing adjustments after a traumatic injury, in order for people to better identify if and when 10 psychological services may need to be referred to.

11 The committee discussed the importance of setting goals throughout rehabilitation after 12 traumatic injury. Rehabilitation goals can be motivational, both as something to attain and 13 something to mark progress. The committee noted that, although evidence was searched for 14 all person-centred goal setting interventions, identified evidence was limited to motivational 15 interviewing, which is a very specific technique within goal setting and not suitable for every 16 individual. Additionally, evidence was judged to be mostly very low or low quality. For these 17 reasons, the committee decided to not specify this technique within the recommendations 18 and instead allow physicians to determine which modality is best for each individual. Using 19 thir clinical expertise and experience, the committee agreed to recommend that goal setting 20 should be introduced as early as possible in rehabilitation and that these goals should be 21 revisited with the patient at regular intervals to help manage levels of psychological 22 adjustment.

23 While the adult component of this evidence review found 5 studies investigating 24 psychological therapies for adjustment and engagement of patients following traumatic injury, no clinically important differences were reported between groups for measures of changes in 25 26 mood, changes in ADL, overall quality of life and pain. Evidence was mainly of low or very low quality. The committee discussed how these findings disagreed with their own 27 28 professional experiences, reporting many beneficial results in their patients. They discussed that a possible reason for this is because there is no 'one size does not fit all' within 29 30 psychological and psychosocial therapies. Due to people's unique pyschology and traumatic 31 injury, not everyone will see benefits from the same study intervention. The committee 32 discussed that often people will have to try multiple different therapies until they find the one 33 that works for them, which is not possible in study conditions. The committee agreed that it is 34 important to offer psychological and emotional support to all people who report or 35 demonstrate symptoms of anxiety, depression and distress interfering with return to their 36 daily life after trauma. They further agreed that this support can be delivered by any member 37 of the MDT with appropriate skills and expertise in supporting patients after traumatic injury, 38 but that an urgent referral for timely access to psychology services (ideally with expertise in 39 physical trauma) is warranted when rehabilitation is adversely affected by psychological 40 factors. These can include failure to progress or failure to engage.

41 No clinically important difference was detected between groups in health symptoms, social 42 integration or depression in a study investigating the effectiveness of family-support 43 interventions for adults with rehabilitation needs following traumatic injury. Again, this 44 disagreed with many of the committee's experiences, who reported that including family-45 support interventions was beneficial following traumatic injury. This is because trauma does 46 not just affect the individual, but their family and friends too. People in the external support 47 network also need to accept changes and adapt post-injury. However, the committee agreed that each individual's personal circumstances and support needs are different. Rather than 48 49 making specific recommendations about the use of family-support interventions, the 50 committee decided to highlight the importance of including family in care discussions about 51 psychological interventions.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

1 The committee discussed the importance of recognising the increased risk of mood disorders 2 accompanying traumatic injuries, and rehabilitation afterwards, and the lay members of the 3 committee stressed how easy it is for patients to hide such symptoms from healthcare staff. 4 Additionally, psychological disorders may develop and reoccur at any stage of the recovery 5 pathway. In the committee's experience, psychological symptoms can often be overlooked 6 once a patient is transferred to outpatient services, as well as transferring to another unit. 7 Psychological disorders (for example, anxiety, depression or PTSD) may occur or reoccur 8 during these key rehabilitation milestones, and it is therefore important that healthcare 9 professionals check regularly for these symptoms so they can factor potential barriers to a 10 rehabilitation programme (for example, decreased engagement). It is important that safeguarding is prioritised at these points as well, with healthcare professionals actively ask 11 12 people about thoughts of self-harm and suicide at all stages of patient's recovery.

13 Evidence was identified from 4 RCTs and 1 cohort study investigating self-management interventions in the adult population. Four of these studies did not report any clinically 14 15 important differences in outcomes between groups and the majority of the evidence was of 16 low or very low quality. These studies all consisted of rigid learning protocols, which the 17 committee felt was not beneficial in psychological treatment because everybody's personal 18 circumstances and support needs are different, and therefore did not wish to make any recommendations based on these studies. The committee discussed the evidence from the 19 20 remaining study, on the beneficial impact on guality of life of multimedia self-care education 21 and information packages on individuals with traumatic injury. Although they noted that the 22 evidence was of low quality and only from one trauma population (burn injuries), the 23 committee discussed that the results of the study agreed with their clinical experience. This 24 was further strengthened by testimony from the expert witness on using standardised 25 educational materials to prepare people for their residential rehabilitation programmes. This 26 has been a relatively recent modification to the rehabilitation programme and driven by 27 national pandemic legislation, so there was no data presented. However, the expert witness commented that a pre-rehabilitation virtual education programme has been well received by 28 29 healthcare professionals and people undergoing rehabilitation, as well as decreasing the 30 length of inpatient rehabilitation programme. Due to the low quality of the evidence showing a 31 beneficial effect, the committee agreed with increasing access to education and access to 32 information for people with rehabilitation needs, and recommended considering using a 33 multimedia self-care package to supplement rehabilitation and used their experience and 34 knowledge to suggest areas to include information on. Additionally, they highlighted that not 35 everyone will have access to the internet, but that this should not affect their ability to access these materials. If this is the case, healthcare professionals should explore other ways of 36 37 delivering information. The committee also included a research recommendation to 38 investigate the effectiveness of a self-management intervention for rehabilitation after 39 traumatic injury in order for stronger recommendations to be made in future updates.

40 Only 1 study was identified for psychological rehabilitation programmes in children and 41 young people following complex trauma, measuring the effectiveness of skin camouflage 42 following burn injury on quality of life. No clinically important difference was reported between groups for this outcome and evidence was judged to be of very low quality. Additionally, the 43 committee discussed that children with burn injuries have a very different rehabilitation when 44 compared to other traumatic injury populations, often requiring extended inpatient stays and 45 46 multiple re-admissions. This limits the generalisability of the study findings. Due to this, the committee decided not to make any recommendations in this area. 47

NICE guidance on post-traumatic stress disorder, anxiety, and depression already exist, and
 the committee recommended that people be treated in line with the appropriate guidelines;
 post-traumatic stress disorder, social anxiety disorder, generalised anxiety disorder and
 panic disorder in adults, depression in adults, depression in adults with a chronic physical
 health problem, depression in children and young people, and service user experience in
 adult mental health. However, they caveated that, in order for this treatment to be most

- 1 effective, it should form part of an overall rehabilitation programme rather than being treated
- 2 separately.

3 Cost effectiveness and resource use

4 There was no existing economic evidence for these reviews.

The committee explained that additional time might be required to reassure patients, discuss
their goals in rehabilitation, assess past or present psychological symptoms, explore the
presence of additional risk factors. The committee explained that all of the above are

- 8 currently done and are good care principles, and will not incur substantial resources to9 services.
- 10 The committee explained that basic psychological and emotional support is currently 11 available across their services. Anyone could deliver such support within multidisciplinary 12 teams. The committee acknowledged that there might be additional training needs. However, 13 services should be able to draw on existing expertise within their broader services. This 14 recommendation reflects standard practice.
- Similarly, referring individuals who fail to progress or fail to engage with psychological

services reflect standard practice and are justified by a clinical need. Referrals happen

17 currently, and this recommendation will not result in substantial additional referrals to

18 psychological services. The recommended treatment pathways have also established cost-

effectiveness in the respective cross-referred guidelines, e.g. <u>Depression in adults</u>, <u>Common</u>
 <u>mental health problems</u>,

- The recommendations on the ongoing risk of low mood, discussing and providing information on psychological support modalities, and signposting for support are based on the committee expert opinion, represent good care principles, and will not incur additional resources to services.
- 25 The committee explained that including information on, e.g. mental health, peer support

26 services, in a tailored package of online education and learning materials as part of a self-

27 management rehabilitation programme would not incur additional costs to the services. It

28 would be mainly signposting to existing resources. The committee also explained that

29 various charities provide self-care information that could be included in such a package.

30 Recommendations supported by this evidence review

31 This evidence review supports recommendations 1.1.3, 1.2.20, 1.2.21, 1.5.1, 1.5.4, 1.5.7,

32 1.9.3, 1.13.1, 1.13.2, 1.13.3, 1.13.4, 1.13.5, 1.13.6 and 1.13.7 in the NICE guideline.

33

1 References

2 Evidence for adults

3 Allegrante 2007

- 4 Allegrante, J. P., Peterson, M. G., Cornell, C. N., MacKenzie, C. R., Robbins, L., Horton, R.,
- 5 Ganz, S. B., Ruchlin, H. S., Russo, P. W., Paget, S. A., Charlson, M. E., Methodological
- 6 challenges of multiple-component intervention: lessons learned from a randomized controlled
- 7 trial of functional recovery after hip fracture, Hss j, 3, 63-70, 2007

8 Castillo 2013

Castillo, R. C., Wegener, S. T., Newell, M. Z., Carlini, A. R., Bradford, A. N., Heins, S. E.,
Wysocki, E., Pollak, A. N., Teter, H., Mackenzie, E. J., Improving outcomes at Level I trauma
centers: An early evaluation of the trauma survivors network, Journal of Trauma and Acute
Care Surgery, 74, 1534-1540, 2013

13 Coker 2019

Coker J, Cuthbert J, Ketchum JM, Holicky R, Huston T, Charlifue S. Re-inventing yourself
after spinal cord injury: a site-specific randomized clinical trial. Spinal Cord.2019;57(4):282292

17 Elinge 2003

Elinge, Eva, Löfgren, Britta, Gagerman, Eva, Nyberg, Lars, A Group Learning Programme for
Old People with Hip Fracture: A Randomized Study, Scandinavian Journal of Occupational
Therapy, 10, 27-33, 2003

21 Holmes 2007

Holmes, A., Hodgins, G., Adey, S., Menzel, S., Danne, P., Kossmann, T., Judd, F., Trial of
interpersonal counselling after major physical trauma, Australian and New Zealand journal of
psychiatry, 41, 926-933, 2007

25 Kooijmans 2017

Kooijmans, H., Post, M. W. M., Stam, H. J., van der Woude, L. H. V., Spijkerman, D. C. M.,
Snoek, G. J., Bongers-Janssen, H. M. H., van Koppenhagen, C. F., Twisk, J. W., Bussmann,
J. B. J., Effectiveness of a Self-Management Intervention to Promote an Active Lifestyle in
Persons With Long-Term Spinal Cord Injury: The HABITS Randomized Clinical Trial,
Neurorehabilitation and Neural Repair, 31, 991-1004, 2017

31 Mercier 2015

Mercier, H. W., Ni, P., Houlihan, B. V., Jette, A. M., Differential Impact and Use of a
Telehealth Intervention by Persons with MS or SCI, Am J Phys Med Rehabil, 94, 987-99,
2015

35 **Migliorini 2016**

Migliorini C, Sinclair A, Brown D, Tonge B, New P. A randomised control trial of an Internet based cognitive behaviour treatment for mood disorder in adults with chronic spinal cord
 injury. Spinal Cord. 2016;54(9):695-701

39 Mohaddes Ardebili 2017

- 40 Mohaddes Ardebili, Fatemeh, Najafi Ghezeljeh, Tahereh, Bozorgnejad, Mehri, Zarei,
- 41 Mohammadreza, Ghorbani, Hooman, Manafi, Farzad, Effect of Multimedia Self-Care

Education on Quality of Life in Burn Patients, World journal of plastic surgery, 6, 292-297,
 2017

3 Nooijen 2016a

Nooijen, C. F., Stam, H. J., Bergen, M. P., Bongers-Janssen, H. M., Valent, L., van
Langeveld, S., Twisk, J., van den Berg-Emons, R. J., A behavioural intervention increases
physical activity in people with subacute spinal cord injury: a randomised trial, Journal of
physiotherapy, 62, 35-41, 2016

8 Nooijen, C. F., Stam, H. J., Schoenmakers, I., Sluis, T. A., Post, M. W., Twisk, J. W., van den

9 Berg-Emons, R. J., Working mechanisms of a behavioural intervention promoting physical

activity in persons with subacute spinal cord injury, Journal of Rehabilitation Medicine, 48,
 583-588, 2016

Nooijen, C. F., Stam, H. J., Sluis, T., Valent, L., Twisk, J., van den Berg-Emons, R. J., A
behavioral intervention promoting physical activity in people with subacute spinal cord injury:
secondary effects on health, social participation and quality of life, Clinical Rehabilitation, 31,
772-780, 2017

16 **Pirente 2007**

- 17 Pirente, N., Blum, C., Wortberg, S., Bostanci, S., Berger, E., Lefering, R., Bouillon, B., Rehm,
- 18 K. E., Neugebauer, E. A., Quality of life after multiple trauma: the effect of early onset
- 19 psychotherapy on quality of life in trauma patients, Langenbeck's archives of surgery /
- 20 Deutsche Gesellschaft fur Chirurgie, 392, 739-745, 2007

21 Schulz 2009

Schulz, Richard, Czaja, Sara J., Lustig, Amy, Zdaniuk, Bozena, Martire, Lynn M., Perdomo,
 Dolores, Improving the quality of life of caregivers of persons with spinal cord injury: a
 randomized controlled trial, Rehabilitation Psychology, 54, 1-15, 2009

25 Wiechman 2015

Wiechman, S. A., Carrougher, G. J., Esselman, P. C., Klein, M. B., Martinez, E. M., Engrav,
L. H., Gibran, N. S., An expanded delivery model for outpatient burn rehabilitation, Journal of
burn care & research, 36, 14-22, 2015

29 Zidén 2008

Zidén, L., Frändin, K., Kreuter, M., Home rehabilitation after hip fracture. A randomized
 controlled study on balance confidence, physical function and everyday activities, Clinical
 Rehabilitation, 22, 1019-1033, 2008

33 Evidence for children and young people

34 Maskell 2014

- 35 Maskell, J., Newcombe, P., Martin, G., Kimble, R., Psychological and psychosocial
- functioning of children with burn scarring using cosmetic camouflage: A multi-centre
 prospective randomised controlled trial. Burns. 40, 135-149, 2014

38

1 Appendices

2 Appendix A – Review protocols

3 Review protocol for review question: What psychological and psychosocial rehabilitation interventions are effective and

4 acceptable for adults with complex rehabilitation needs after traumatic injury?

5 Table 5: Review protocol for psychological and psychosocial rehabilitation interventions for adults

ID	Field	Content
0.	PROSPERO registration number	CRD42019135320
1.	Review title	Rehabilitation packages and programmes for adults
2.	Review question	2.3a: What psychological and psychosocial rehabilitation interventions are effective and acceptable for adults with complex rehabilitation needs after traumatic injury?
3.	Objective	To evaluate the effectiveness of psychological and psychosocial rehabilitation interventions among adults with complex rehabilitation needs after traumatic injury
4.	Searches	The following databases will be searched: • Cochrane Central Register of Controlled Trials (CENTRAL) • Cochrane Database of Systematic Reviews (CDSR) • Embase • MEDLINE Searches will be restricted by: • Date: 1995 onwards as there has been significant change in practice since then • English language • Human studies The full search strategies for MEDLINE database will be published in the final review.
5.	Condition or domain being studied	 Complex rehabilitation needs resulting from traumatic injury 'Complex rehab needs' refers to 'multiple needs, and will always involve coordinated multidisciplinary input from 2 or more allied health professional disciplines, and also include the following: Vocational or educational social support for the person to return to their pervious functional level, including return to work, school or college

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

ID	Field	Content
		 Emotional, psychological and psychosocial support Equipment or adaptations Ongoing recovery from injury that may change the person's rehabilitation needs (for example, restrictions of weight bearing, cast immobilisation in feature clinic) Further surgery and readmissions to hospital Traumatic injury is defined as 'traumatic injury as injury that requires admission to hospital at the time of
6	Population	injury.' Inclusion: Adults (aged 18 years or above) with complex rehabilitation needs resulting from traumatic injury that required admission to hospital
		 Exclusion: Adults with complex rehabilitation needs resulting from traumatic brain injury (including anoxic brain injury, for example, drowning and strangulation) Adults with traumatic injuries who do not have complex rehabilitation needs and/or do not require admission to hospital Adults with complex rehabilitation needs resulting from traumatic injury who are admitted to the ICU
7	Intervention	 Standard rehabilitation care consisting of: physiotherapy [range of movement exercises, exercises to maintain muscle function, mobilisation and training with mobilisation aids such as crutches or frame], occupational therapy assessment, and identification and support of basic activities of daily living through training or aids (e.g. toileting equipment, perching stools, long-handled aids, adapted eating utensils) in addition to at least one of the following: Cosmetic interventions for trauma induced changes to the body e.g. skin camouflage, tattooing) Psychological therapies for adjustment and engagement (Compassionate mind therapy, Acceptance and commitment therapy, Mindfulness, Visualisation or 'mentalisation' to support physical rehab, Relaxation [progressive, or breathing based, or other], Cognitive behavioural therapy)
		 Family support (including education, advice, signposting to useful agencies such as Citizens advice) Self-management interventions (i.e., education to understand how one might be affected by fatigue, depression, Bridges Self-management, conversation with consultant etc.) Person-centred goal setting (including motivational interviewing) Exclusion: Rehabilitation packages and programmes relating to traumatic brain injury, sight loss and hearing loss

ID	Field	Content
		 Social care interventions (for example, home care or personal assistance) Long-term care and rehabilitation packages for people with long-term care needs Specific pain management interventions
8	Comparator/Reference standard/Confounding factors	 Standard rehabilitation care consisting of: physiotherapy [range of movement exercises, exercises to maintain muscle function, mobilisation and training with mobilisation aids such as crutches or frame], occupational therapy assessment, and identification and support of basic activities of daily living through training or aids (e.g. toileting equipment, perching stools, long-handled aids, adapted eating utensils). Studies that employ the same intervention program as listed under 'interventions' but vary it in terms of any of the following: Frequency Intensity Timing
9	Types of study to be included	 Randomised controlled trials (RCTs) Systematic review of RCTs If no RCT data are available for an intervention, evidence from the followings will be considered in order Cluster-randomised trial Systematic review of non-randomised studies Comparative prospective cohort studies with N≥100 per treatment arm Comparative retrospective cohort studies with N≥100 per treatment arm
10	Other exclusion criteria	Study design: • Cross-over design • Case-controls • Cross-sectional • Case series and case reports • Audits Language: • Non-English

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

ID	Field	Content
		Publication status: • Abstract only
11	Context	 Settings - Inclusion: All inpatient, outpatient and community settings in which rehabilitation services following traumatic injury are provided Exclusion: Accident and emergency departments Critical care units Prisons
12	Primary outcomes (critical outcomes)	 Critical: Overall quality of life [EURO-QoL 5D 3L, SF-36, SF-12, SF-6D, SFMA] Patient acceptability (any direct measure) Changes in mood [Depression measures – HADS, PHQ-9, BDI, DAS] Timeframe for the follow-up will be 0 to 18 months. This will be grouped into short-term (0 to 6 months) and long-term (>6 to 18 months).
13	Secondary outcomes (important outcomes)	 Important: Return to work or education Changes in activity of daily living (COPM, Barthel ADL index, Katz, PSMS, OARS, PAT, E-ADL-Test, GAS, FIMFAM) Pain (e.g. VAS) Timeframe for the follow-up will be 0 to 18 months. This will be grouped into short-term (0 to 6 months) and long-term (>6 to 18 months).
14	Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into STAR and de- duplicated. 5% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

ID	Field	Content
		extract data from studies (see Developing NICE guidelines: the manual section 6.4).
15	Risk of bias (quality) assessment	Risk of bias will be assessed using the appropriate checklist as described in Developing NICE guidelines: the manual.
16	Strategy for data synthesis	NGA STAR software will be used for generating bibliographies/citations, study sifting and data extraction.
		If pairwise meta-analyses are undertaken, they will be performed using Cochrane Review Manager (RevMan).
		'GRADEpro' will be used to assess the quality of evidence for each outcome.
17	Analysis of sub-groups	No subgroups were specified for this question for stratification of the data, but if there is heterogeneity, we will look at the following subgroups to try to identify the source of it:
		Upper limb / lower limb
		 People with pre-existing physical and/or mental health conditions (including substance misuse), physical and learning disability
		Age below 65 years / age above 65 years
		Frail / not frail
		 Vulnerable adults or those who require safeguarding
18	Type and method of review	Intervention
19	Language	English
20	Country	England
21	Anticipated or actual start date	07/09/2019
22	Anticipated completion date	23/10/2019
23	Stage of review at time of this submission	Review stage Started Completed
		Preliminary searches
		Piloting of the study selection process
		Formal screening of search results against eligibility criteria

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

ID	Field	Content
		Data extraction
		Risk of bias (quality) assessment
		Data analysis
24	Named contact	National Guideline Alliance
25	Review team members	National Guideline Alliance
26	Funding sources/sponsor	This systematic review is being completed by the National Guideline Alliance which receives funding from NICE.
27	Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.
28	Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: https://www.nice.org.uk/guidance/indevelopment/gid-ng10105
29	Other registration details	
30	Reference/URL for published protocol	
31	Dissemination plans	
32	Keywords	
33	Details of existing review of same topic by same authors	
34	Current review status	
35	Additional information	
36	Details of final publication	www.nice.org.uk

ADL: Activities of daily living; BDI: Beck depression inventory; CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials;

CHQ CF-80: 80 item child health questionnaire; CHQ PF-50: 50 item child health questionnaire, parent completed; COPM: Canadian occupational performance measure;

DARE: Database of Abstracts of Reviews of Effects; DAS: Disability assessment schedule; E-ADL-Test: Erlangen Activities of Daily Living test; EURO-QoL 5D 3L: EuroQol 5

dimensions and 3 levels; FIMFAM: Functional independence measure and functional assessment measure; GAS: Goal attainment scaling; GRADE: Grading of

Recommendations Assessment, Development and Evaluation; HADS: Hospital anxiety and depression scale; HTA: Health Technology Assessment; ICU: intensive care unit;

234567 N: number; NGA: National Guideline Alliance; NHS: National health service; NICE: National Institute for Health and Care Excellence; OARS: Older Americans resources and services; PAT: Performance ADL test; PHQ-9: 9 item patient health questionnaire; PSMS: Physical self-maintenance scale; RCT: randomised controlled trial; RoB: risk of bias;

8 SCIM: Spinal cord independence measure; SD: standard deviation; SFMA: Selective functional movement assessment; SF-12: 12 item short-form survey; SF-36: 36 item

9 short-form survey: SF-6D: 6-dimension short-form: VAS: Visual: analogue scale

1

Review protocol for review question: What psychological and psychosocial rehabilitation interventions are effective and 10

acceptable for children and young people with complex rehabilitation needs after traumatic injury? 11

12 Table 6: Review protocol for psychological and psychosocial rehabilitation interventions for children and young people

ID	Field	Content
0.	PROSPERO registration number	CRD42019135321
1.	Review title	Rehabilitation packages and programmes for children and young people
2.	Review question	2.3b: What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?
3.	Objective	To evaluate the effectiveness of psychological and psychosocial rehabilitation interventions among children and young people with complex rehabilitation needs after traumatic injury
4.	Searches	 The following databases will be searched: Cochrane Central Register of Controlled Trials (CENTRAL) Cochrane Database of Systematic Reviews (CDSR) Embase MEDLINE PsycInfo Searches will be restricted by: Date: 1995 onwards as there has been significant change in practice since then English language Human studies The full search strategies for MEDLINE database will be published in the final review.

ID	Field	Content
5.	Condition or domain being	Complex rehabilitation needs resulting from traumatic injury
	studied	'Complex rehab needs' refers to 'multiple needs, and will always involve coordinated multidisciplinary input from 2 or more allied health professional disciplines, and also include the following:
		 Vocational or educational social support for the person to return to their pervious functional level, including return to work, school or college
		 Emotional, psychological and psychosocial support
		Equipment or adaptations
		 Ongoing recovery from injury that may change the person's rehabilitation needs (for example, restrictions of weight bearing, cast immobilisation in feature clinic)
		 Further surgery and readmissions to hospital
		Traumatic injury is defined as 'traumatic injury as injury that requires admission to hospital at the time of injury.'
6	Population	Inclusion:
		Children and young people (aged below 18 years) with complex rehabilitation needs resulting from traumatic injury that required admission to hospital
		Exclusion:
		 Children and young people with complex rehabilitation needs resulting from traumatic brain injury (including anoxic brain injury, for example, drowning and strangulation)
		 Children and young people with traumatic injuries who do not have complex rehabilitation needs and/or do not require admission to hospital
		 Children and young people with complex rehabilitation needs resulting from traumatic injury who are admitted to the PICU
7	Intervention	Standard rehabilitation care consisting of: physiotherapy [range of movement exercises, exercises to maintain muscle function, mobilisation and training with mobilisation aids such as crutches or frame], occupational therapy assessment, and identification and support of basic activities of daily living through training or aids (e.g. toileting equipment, perching stools, long-handled aids, adapted eating utensils) in addition to at least one of the following:
		 Cosmetic interventions for trauma induced changes to the body e.g. skin

ID	Field	Content
		 camouflage, tattooing) Psychological therapies for adjustment and engagement (Compassionate mind therapy, Acceptance and commitment therapy, Mindfulness, Visualisation or 'mentalisation' to support physical rehab, Relaxation [progressive, or breathing based, or other], Cognitive behavioural therapy) Family support (including education, advice, signposting to useful agencies such as Citizens advice or Changing Faces) Self-management interventions (i.e., education to understand how one might be affected by fatigue, depression, Bridges self-management, conversation with consultant etc.) Person-centred goal setting (including motivational interviewing Play therapy Family therapy (including sibling support) Interventions for adaptive dysfunction and behavioural disturbance Exclusion: Rehabilitation packages and programmes relating to traumatic brain injury, sight loss and hearing loss Social care interventions (for example, home care or personal assistance)
		 Long-term care and rehabilitation packages for people with long-term care needs Specific pain management interventions
8	Comparator/Reference standard/Confounding factors	 Standard rehabilitation care consisting of: physiotherapy [range of movement exercises, exercises to maintain muscle function, mobilisation and training with mobilisation aids such as crutches or frame], occupational therapy assessment, and identification and support of basic activities of daily living through training or aids (e.g. toileting equipment, perching stools, long-handled aids, adapted eating utensils). Studies that employ the same intervention program as listed under 'interventions' but vary it in terms of any of the following: Frequency Intensity Timing
9	Types of study to be included	Systematic review of RCTsRandomised controlled trial

ID	Field	Content
		If no RCT data are available for an intervention, evidence from the followings will be considered in order • Cluster-randomised trial • Systematic review of non-randomised studies • Comparative prospective cohort studies with N≥100 per treatment arm • Comparative retrospective cohort studies with N≥100 per treatment arm
10	Other exclusion criteria	Study design: • Cross-over design • Case-controls • Cross-sectional • Case series and case reports • Audits Language: • Non-English Publication status: • Abstract only
11	Context	Settings - Inclusion: • All inpatient, outpatient and community settings in which rehabilitation services following traumatic injury are provided Exclusion: • Accident and emergency departments • Critical care units • Prisons
12	Primary outcomes (critical outcomes)	 Critical: Overall quality of life including quality of sleep [e.g., CHQ-CF80, CHQ-PF-50, PEDS-QL, EURO-QoL 5D 3L Y, SF-36, SF-12, SF-6D, Tarn, SCIM]]

ID	Field	Content
		 Patient and families and carers' acceptability (any direct measure; if not reported, but patient satisfaction is, this will be reported instead) Changes in mood [Any measure, PEDS-QL, Depression measures – HADS, PH- 20, DBL DAQ]
		 Q9, BDI, DAS] Babies only: Alberta Infant Motor Scale (AIMS; pre-term to 19 months. Bayley Assessment (1 to 42 months) Timeframe for the follow-up will be 0 to 5 years. This will be grouped into short-term (0 to 6 months) and long-term (> 6 months to 5 years).
13	Secondary outcomes (important outcomes)	 Important: Return to nursery, education, training or work Changes in activity of daily living (e.g., COPM, Barthel ADL index, Katz, PSMS, OARS, PAT, E-ADL-Test, GAS, FIMFAM) Pain (VAS, any measure) Changes in the 'Family Needs Questionnaire' scores. Timeframe for the follow-up will be 0 to 5 years. This will be grouped into short-term (0 to 6 months) and long-term (> 6 months to 5 years).
14	Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into STAR and de-duplicated. 5% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4.
15	Risk of bias (quality) assessment	Risk of bias will be assessed using the appropriate checklist as described in Developing NICE guidelines: the manual.
16	Strategy for data synthesis	NGA STAR software will be used for generating bibliographies/citations, study sifting and data extraction. If pairwise meta-analyses are undertaken, they will be performed using Cochrane Review Manager (RevMan).

ID	Field	Content
		'GRADEpro' will be used to assess the quality of evidence for each outcome.
17	Analysis of sub-groups	The following subgroups were specified for this question for stratification of the data:
		 Children and young people who are suspected of sustaining non-accidental injuries versus accidental injuries
		Children and young people with parents known to social services versus not known
		 Children and young people with young (< 20 years at birth of child) parents versus not young (≥ 20 years at birth of child)
		 Children and young people with parents from deprived backgrounds versus not deprived backgrounds
		 Children and young people with parents who have mental health issues versus none
		If there is any further unexplained heterogeneity, we will look at the following subgroups to try to identify the source of it:
		Upper limb / lower limb
		 Children and young people with pre-existing physical and/or mental health conditions (including substance misuse), physical and learning disability versus no pre-existing conditions
		 Children and young people whose parents are very involved in their rehabilitation/recovery (e.g., by staying overnight in hospital) versus not involved
		 Age (0-3 versus 4-7 versus 8-12 versus 13-17
18	Type and method of review	Intervention
19	Language	English
20	Country	England
21	Anticipated or actual start date	16/08/2019
22	Anticipated completion date	21/10/2019
23	Stage of review at time of this submission	Review stage Started Complete d
		Preliminary searches
		Piloting of the study selection process

ID	Field	Content	
		Formal screening of search results against <	
		Data extraction	
		Risk of bias (quality) 🔽	
		Data analysis	
24	Named contact	National Guideline Alliance	
25	Review team members	National Guideline Alliance	
26	Funding sources/sponsor	This systematic review is being a receives funding from NICE.	completed by the National Guideline Alliance which
27	Conflicts of interest	guidelines (including the evidence any potential conflicts of interest dealing with conflicts of interest. also be declared publicly at the s each meeting, any potential com committee Chair and a senior m exclude a person from all or part member's declaration of interest	is and anyone who has direct input into NICE ce review team and expert witnesses) must declare in line with NICE's code of practice for declaring and Any relevant interests, or changes to interests, will start of each guideline committee meeting. Before flicts of interest will be considered by the guideline ember of the development team. Any decisions to t of a meeting will be documented. Any changes to a s will be recorded in the minutes of the meeting. published with the final guideline.
28	Collaborators	who will use the review to inform recommendations in line with se	review will be overseen by an advisory committee the development of evidence-based action 3 of Developing NICE guidelines: the manual. ittee are available on the NICE website: e/indevelopment/gid-ng10105
29	Other registration details	-	
30	Reference/URL for published protocol	https://www.crd.york.ac.uk/prosp	pero/display_record.php?RecordID=135321
31	Dissemination plans		
32	Keywords		

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

ID	Field	Content
33	Details of existing review of same topic by same authors	
34	Current review status	
35	Additional information	
36	Details of final publication	www.nice.org.uk

ADL: Activities of daily living; BDI: Beck depression inventory; CCTR: Cochrane Controlled Trials Register; CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; CHQ CF-80: 80 item child health questionnaire; CHQ PF-50: 50 item child health questionnaire, parent completed; COPM: Canadian occupational performance measure; DARE: Database of Abstracts of Reviews of Effects; DAS: Disability assessment schedule; E-ADL-Test: Erlangen Activities of Daily Living test; EURO-QoL 5D 3L: EuroQol 5 dimensions and 3 levels; FIMFAM: Functional independence measure and functional assessment measure; GAS: Goal attainment scaling; GRADE: Grading of Recommendations Assessment, Development and Evaluation; HADS: Hospital anxiety and depression scale; HTA: Health Technology Assessment; ICU: intensive care unit; NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; NIHR: National Institute for Health Research; OARS: Older Americans resources and services; PAT: Performance ADL test; PEDS-QL: Paediatric quality of life inventory; PHQ-9: 9 item patient health questionnaire; PICU; paediatric intensive care unit; PSMS: Physical self-maintenance scale; SCIM: Spinal cord independence measure; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey; SF-6D: 6-dimension short-form; RCT(s): Randomised controlled trial(s)

1 Appendix B – Literature search strategies

- 2 Literature search strategies for review questions:
- 3 **B.3a** What psychological and psychosocial rehabilitation interventions are
- 4 effective and acceptable for adults with complex rehabilitation needs after
- 5 traumatic injury?
- 6 B.3b What psychological and psychosocial rehabilitation interventions are
- effective and acceptable for children and young people with complex
 rehabilitation needs after traumatic injury?)
- 9 A combined search was conducted for both review questions.
- 10 Review question search strategies

11 Databases: Medline; Medline EPub Ahead of Print; and Medline In-Process & 12 Other Non-Indexed Citations

13 Date of last search: 08/08/2019

#	Searches
1	ADOLESCENT/ or MINORS/
2	(adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jw,nw.
3	exp CHILD/
4	(child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or
-	girl?).ti,ab,jw,nw.
5	exp INFANT/
6	(infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw,nw.
7	exp PEDIATRICS/ or exp PUBERTY/
8	(p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw,nw.
9	
10	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ o exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
11	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? o centre? or center?))).ti,ab.
12	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
13	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
14	(patient? adj5 trauma\$).ti,ab.
15	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
16	wound\$ patient?.ti,ab.
17	injur\$ patient?.ti,ab.
18	accident\$ patient?.ti,ab.
19	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ti.
20	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ of exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ab. /freq=2
21	exp MULTIPLE TRAUMA/
22	TRAUMATOLOGY/
23	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	-
#	Searches
24	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
25 26	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab. ((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
20	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
28	(acute adi1 (iniur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
29	(polytrauma? or poly-trauma?).ti,ab.
30	traumatolog\$.ti,ab.
31	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (exp *"WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/))
32	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
33	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
34	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
35 36	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab. (ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or
	ACCIDENTS, TRAFFIC/) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
37 38	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab. *SPINAL CORD INJURIES/ or *SPINAL CORD COMPRESSION/
39	exp *THORACIC INJURIES/ or *ACUTE LUNG INJURY/
40	*PERIPHERAL NERVE INJURIES/ or exp *CRANIAL NERVE INJURIES/
41	exp *AMPUTATION/ or *AMPUTATION, TRAUMATIC/ or *AMPUTEES/ or *AMPUTATION STUMPS/ or *LIMB SALVAGE/
42	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
43	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
44	((Flail\$ or stove in) adj3 chest?).ti.
45	(rib? adj3 fractur\$).ti.
46	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
47 48	(amputat\$ or amputee?).ti. (limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
49	*HEAD INJURIES, CLOSED/ or *HEAD INJURIES, PENETRATING/
50	(head adj3 injur\$).ti.
51	or/10-50
52	exp BRAIN INJURIES/
53	(brain adj3 injur\$).ti,ab.
54	or/52-53
55 56	
56 57	COSMETICS/ COSMETIC TECHNIQUES/
58	camouflag\$.ti,ab.
59	cosmetics.ti,ab.
60	or/56-59
61	(Compassion\$ adj3 mind\$ adj3 (therap\$ or train\$)).ti,ab.
62	"ACCEPTANCE AND COMMITMENT THERAPY"/
63	(Accept\$ adj3 commit\$ adj3 (therap\$ or train\$)).ti,ab.
64	MINDFULNESS/
65 66	Mindfulness.ti,ab.
66 67	(Visuali?ation adj3 (therap\$ or train\$)).ti,ab. mentali?ation.ti,ab.
68	RELAXATION THERAPY/
69	BREATHING EXERCISES/
70	((Relax\$ or progressive\$ or breath\$) adj3 (therap\$ or train\$ or exercis\$)).ti,ab.
71	COGNITIVE BEHAVIORAL THERAPY/
72	(Cognit\$ adj3 behav\$ adj3 (therap\$ or train\$)).ti,ab.
73	CBT.ti,ab.
74	MOTIVATIONAL INTERVIEWING/
75 76	(motivat\$ adj3 interview\$).ti,ab. or/61-75
76 77	07/61-75 (FAMILY/ or SPOUSES/ or GRANDPARENTS/ or exp PARENTS/ or SIBLINGS/ or CAREGIVERS/) and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or
78	COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/) ((family or families or spouse? or wife or wives or husband? or parent? or parental or father? or mother? or
	grandparent? or grandfather? or grandmother? or sibling? or brother? or sister? or carer? or caregiver?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
79	((family or families) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$)).ab.
80	or/77-79
81	SELF-MANAGEMENT/
82	*SELF CARE/
83	*SELF EFFICACY/
84	(self adj1 (manag\$ or care or help or responsib\$ or efficacy)).ti.
85	(self adj1 manag\$).ab.
86	((fatigue? or depress\$) adj3 (information or educat\$ or communicat\$ or advice or advise? or advising or counsel\$)).ti,ab.
87	or/81-86
88	GOALS/
89	((patient? or person\$ or individual\$ or client? or user? or participant?) adj10 goal? adj3 (centre\$ or center\$ or plan\$ or set\$ or adjust\$ or rehab\$)).ti,ab.
90	or/88-89
91	PLAY THERAPY/
92	(play\$ adj3 therap\$).ti,ab.
93	or/91-92
94	FAMILY THERAPY/
95	(famil\$ adj3 therap\$).ti,ab.
96	SIBLINGS/ and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/)
97	((sibling? or brother? or sister?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti,ab.
98	or/94-97
99	PROBLEM BEHAVIOR/
100	((intervention? or therapy or therapies) adj3 (adapt\$ or behavio\$)).ti,ab.
101	or/99-100
102	55 and 60
103	55 and 76
104	55 and 80
105	55 and 87
106	55 and 90
107	9 and 55 and 93
108	9 and 55 and 98
109	9 and 55 and 101
110	or/102-109
111	limit 110 to english language
112	limit 111 to yr="1995 -Current"
113	
114	
115	
116	exp HISTORICAL ARTICLE/
117	ANECDOTES AS TOPIC/
118	COMMENT/
119	CASE REPORT/
120	(letter or comment*).ti.
121	or/113-120 RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
122	
123	121 not 122 ANIMALS/ not HUMANS/
124	exp ANIMALS/ hol Homans/ exp ANIMALS, LABORATORY/
125 126	exp ANIMALS, LABORATORY/ exp ANIMAL EXPERIMENTATION/
127	exp MODELS, ANIMAL/ exp RODENTIA/
128	
129	(rat or rats or mouse or mice).ti. or/123-129
130 131	112 not 130
131	

1

2 Databases: Embase; and Embase Classic

3 Date of last search: 08/08/2019

Searches1 exp ADOLESCENT/

- 2 (adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
- 3 exp CHILD/
- 4 (child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
5	exp INFANT/
6	(infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
7	exp PEDIATRICS/ or exp PUBERTY/
8	(p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
9	or/1-8
10	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
11	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
12 13	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
13	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
14	(patient? adj5 trauma\$).ti,ab.
15	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
16	wound\$ patient?.ti,ab.
17	injur\$ patient?.ti,ab.
18 19	accident\$ patient?.ti,ab. (exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND
	STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ti.
20	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ab. /freq=2
21	MULTIPLE TRAUMA/
22	TRAUMATOLOGY/
23	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
24	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
25 26	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab. ((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
26 27	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
28	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
29	(polytrauma? or poly-trauma?).ti,ab.
30 31	traumatolog\$.ti,ab. (ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/))
32	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
33	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
34	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
35 36	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab. (ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/)
30	and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
37	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or centre?))).ti,ab.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
38	*SPINAL CORD INJURY/ or *SPINAL CORD COMPRESSION/
39	exp *THORAX INJURY/ or *ACUTE LUNG INJURY/ or exp *RIB FRACTURE/
40	exp *NERVE INJURY/
41	exp *AMPUTATION/ or *AMPUTEE/ or *LIMB SALVAGE/
42	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
43	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
44	((Flail\$ or stove in) adj3 chest?).ti.
45	(rib? adj3 fractur\$).ti.
46	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
47	(amputat\$ or amputee?).ti.
48	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti. *HEAD INJURY/
49 50	(head adj3 injur\$).ti.
50 51	or/10-50
52	exp BRAIN INJURY/
53	(brain adj3 injur\$).ti,ab.
53 54	or/52-53
55	51 not 54
56	*COSMETIC/
57	*ESTHETIC SURGERY/
58	camouflag\$.ti,ab.
59	cosmetics.ti,ab.
60	or/56-59
61	(Compassion\$ adj3 mind\$ adj3 (therap\$ or train\$)).ti,ab.
62	*"ACCEPTANCE AND COMMITMENT THERAPY"/
63	(Accept\$ adj3 commit\$ adj3 (therap\$ or train\$)).ti,ab.
64	*MINDFULNESS/
65	Mindfulness.ti,ab.
66	(Visuali?ation adj3 (therap\$ or train\$)).ti,ab.
67	mentali?ation.ti.ab.
68	*RELAXATION TRAINING/
69	*BREATHING EXERCISE/
70	((Relax\$ or progressive\$ or breath\$) adj3 (therap\$ or train\$ or exercis\$)).ti,ab.
71	*COGNITIVE BEHAVIORAL THERAPY/
72	(Cognit\$ adj3 behav\$ adj3 (therap\$ or train\$)).ti,ab.
73	CBT.ti,ab.
74	*MOTIVATIONAL INTERVIEWING/
75	(motivat\$ adj3 interview\$).ti,ab.
76	or/61-75
77 78	(FAMILY/ or exp SPOUSE/ or exp GRANDPARENT/ or PARENT/ or FATHER/ or MOTHER/ or exp SIBLING/ or CAREGIVER/) and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or INTERPERSONAL COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/) ((family or families or spouse? or wife or wives or husband? or parent? or parental or father? or mother? or
70	(ranning of ranning of variable? of while of while of whiles of husband? of parents of parental of rather? of rather? of rather? of grandparent? or grandfather? or grandmother? or sibling? or brother? or sister? or carer? or caregiver?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti.
79	((family or families) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$)).ab.
80	or/77-79
81	*SELF CARE/
82	(self adj1 (manag\$ or care or help or responsib\$ or efficacy)).ti.
83	(self adj1 manag\$).ab.
84 85	((fatigue? or depress\$) adj3 (information or educat\$ or communicat\$ or advice or advise? or advising or counsel\$)).ti,ab. or/81-84
86	*MOTIVATION/
87	GOAL ATTAINMENT/
88	((patient? or person\$ or individual\$ or client? or user? or participant?) adj10 goal? adj3 (centre\$ or center\$ or plan\$ o set\$ or adjust\$ or rehab\$)).ti,ab.
89	or/86-88
90	PLAY THERAPY/
91	(play\$ adj3 therap\$).ti,ab.
92	or/90-91
93	FAMILY THERAPY/
94	(famil\$ adj3 therap\$).ti,ab.
95	exp SIBLING/ and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or INTERPERSONAL COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/)
96	((sibling? or brother? or sister?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti,ab.
97	or/93-96
98	PROBLEM BEHAVIOR/
99	((intervention? or therapy or therapies) adj3 (adapt\$ or behavio\$)).ti,ab.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
100	or/98-99
101	55 and 60
102	55 and 76
103	55 and 80
104	55 and 85
105	55 and 89
106	9 and 55 and 92
107	9 and 55 and 97
108	9 and 55 and 100
109	or/101-108
110	limit 109 to english language
111	limit 110 to yr="1995 -Current"
112	letter.pt. or LETTER/
113	note.pt.
114	editorial.pt.
115	CASE REPORT/ or CASE STUDY/
116	(letter or comment*).ti.
117	or/112-116
118	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
119	117 not 118
120	ANIMAL/ not HUMAN/
121	NONHUMAN/
122	exp ANIMAL EXPERIMENT/
123	exp EXPERIMENTAL ANIMAL/
124	ANIMAL MODEL/
125	exp RODENT/
126	(rat or rats or mouse or mice).ti.
127	or/119-126
128	111 not 127

1

2 Databases: Cochrane Central Register of Controlled Trials; and Cochrane 3 Database of Systematic Reviews

4 Date of last search: 08/08/2019

#1 [mh ^ADOLESCENT] #2 [mh ^MINORS] #3 (adolescen* or teen* or youth* or young or juvenile* or minors or highschool*):ti,ab #4 [mh CHILD] #5 (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid* or kinderga girl*):ti,ab #6 [mh INFANT] #7 (infan* or neonat* or newborn* or baby or babies):ti,ab #8 [mh PEDIATRICS] #9 [mh PUBERTY]	ar* or boy* or
#3 (adolescen* or teen* or youth* or young or juvenile* or minors or highschool*):ti,ab #4 [mh CHILD] #5 (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid* or kinderga girl*):ti,ab #6 [mh INFANT] #7 (infan* or neonat* or newborn* or baby or babies):ti,ab #8 [mh PEDIATRICS]	ar* or boy* or
 #4 [mh CHILD] #5 (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid* or kinderga girl*):ti,ab #6 [mh INFANT] #7 (infan* or neonat* or newborn* or baby or babies):ti,ab #8 [mh PEDIATRICS] 	ar* or boy* or
 #4 [mh CHILD] #5 (child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid* or kinderga girl*):ti,ab #6 [mh INFANT] #7 (infan* or neonat* or newborn* or baby or babies):ti,ab #8 [mh PEDIATRICS] 	ar* or boy* or
girl*):ti,ab #6 [mh INFANT] #7 (infan* or neonat* or newborn* or baby or babies):ti,ab #8 [mh PEDIATRICS]	ar* or boy* or
#7 (infan* or neonat* or newborn* or baby or babies):ti,ab#8 [mh PEDIATRICS]	
#8 [mh PEDIATRICS]	
#9 [mh PUBERTY]	
#10 (pediatric* or paediatric* or pubert* or prepubert* or pubescen* or prepubescen*):ti,ab	
#11 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10	
#12 ([mh "WOUNDS AND INJURIES"] not ([mh ^ASPHYXIA] or [mh ^"BATTERED CHILD SYNDROME INJURIES"] or [mh "BITES AND STINGS"] or [mh DROWNING] or [mh ^"EXTRAVASATION OF D AND THERAPEUTIC MATERIALS"] or [mh ^FROSTBITE] or [mh "HEAT STRESS DISORDERS"] "RADIATION INJURIES"] or [mh ^RETROPNEUMOPERITONEUM] or [mh ^"SURGICAL WOUND	DIAGNOSTIC
#13 ([mh ^HOSPITALIZATION] or [mh ^"PATIENT ADMISSION"] or [mh ^"ADOLESCENT, HOSPITALI ^"CHILD, HOSPITALIZED"] or [mh HOSPITALS] or [mh "EMERGENCY SERVICE, HOSPITAL"] or "INTENSIVE CARE UNITS"] or [mh ^"REHABILITATION CENTERS"])	
#14 #12 and #13	
#15 (hospitalised or hospitalized or hospitalistion* or hospitalization* or ((admi* or stay* or stayed or trea near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* o	
#16 #12 and #15	
#17 ((hospitalised or hospitalized or hospitalistion* or hospitaliztion*) near/10 (injur* or wound* or traum burned or fractur* or accident*)):ti,ab	າa* or burn* or
#18 ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* NICU* or department* or centre* or center*) near/5 (injur* or wound* or trauma* or burn* or burned accident*)):ti,ab	
#19 (patient* near/5 trauma*):ti,ab	
#20 (patient* near/3 (burn* or burned or fractur*)):ti,ab	
#21 "wound* patient*":ti,ab	
#22 "injur* patient*":ti,ab	

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

# Searches #23 "accident* patient*":ti,ab #24 trauma*:ti,ab #25 #12 and #24 #26 [mh "MULTIPLE TRAUMA"] #27 [mh *MULTIPLE TRAUMA"] #28 (trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab #29 ((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab #30 (trauma* near/3 (severe or severely or major or multiple)):ti,ab #31 ((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab #31 ((injur* or bodiy) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #32 ((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma*):ti,ab #34 (polytrauma*):ti,ab #35 traumatolog*:ti,ab #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burned or fractur*):ti,ab #39 #36	
#24 trauma*:ti,ab #25 #12 and #24 #26 [mh "MULTIPLE TRAUMA"] #27 [mh ^TRAUMATOLOGY] #28 (trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab #29 ((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab #30 (trauma* near/3 (severe or severely or major or multiple)):ti,ab #31 ((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)	
 #25 #12 and #24 #26 [mh "MULTIPLE TRAUMA"] #27 [mh ^TRAUMATOLOGY] #28 (trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab #29 ((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab #30 (trauma* near/3 (severe or severely or major or multiple)):ti,ab #31 ((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab #32 ((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or burn* or burned or fractur*):ti,ab #38 (injur* or wound* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/3 (serious* or severe or severely or major)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab 	
#26[mh "MULTIPLE TRAUMA"]#27[mh ^TRAUMATOLOGY]#28(trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab#29((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab#30(trauma* near/3 (severe or severely or major or multiple)):ti,ab#31((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab#32((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab#33(acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab#34(polytrauma* or poly-trauma*):ti,ab#35traumatolog*:ti,ab#36([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCID OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"])#37#12 and #36#38(injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab#40(accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab#41(accident* near/3 (serious* or severe or severely or major)):ti,ab	
 #28 (trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab #29 ((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab #30 (trauma* near/3 (severe or severely or major or multiple)):ti,ab #31 ((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab #32 ((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 ((Imh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
 #29 ((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab #30 (trauma* near/3 (severe or severely or major or multiple)):ti,ab #31 ((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab #32 ((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 (([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
 #30 (trauma* near/3 (severe or severely or major or multiple)):ti,ab #31 ((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab #32 ((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab 	
 #31 ((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab #32 ((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 ((Imh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab 	
 #32 ((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 (([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
 #33 (acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIE OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
 #34 (polytrauma* or poly-trauma*):ti,ab #35 traumatolog*:ti,ab #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIE OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	JENTS,
 #35 traumatolog*:ti,ab #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	DENTS,
 #36 ([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIE OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"]) #37 #12 and #36 #38 (injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	DENTS,
OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"])#37#12 and #36#38(injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab#39#36 and #38#40(accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab#41(accident* near/3 (serious* or severe or severely or major)):ti,ab#42#13 and #36	JENIO,
 #37 #12 and #36 #38 (injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab #39 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
 #36 and #38 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
 #40 (accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
 #41 (accident* near/3 (serious* or severe or severely or major)):ti,ab #42 #13 and #36 	
#42 #13 and #36	
#43 (hospitalised or hospitalized or hospitalistion* or hospitalization* or (admi* or stav* or staved or treat*	
near/5 (hospital* or unit* or intensive care or ICU* or PICU* or NICU* or department* or centre* or ce	nter^))):ti,ab
 #44 #36 and #43 #45 [mh ^"SPINAL CORD INJURIES"] or [mh ^"SPINAL CORD COMPRESSION"] 	
#46 [mh "THORACIC INJURIES"] or [mh ^"ACUTE LUNG INJURY"]	
#47 [mh ^"PERIPHERAL NERVE INJURIES"] or [mh "CRANIAL NERVE INJURIES"]	
#48 [mh AMPUTATION] or [mh ^"AMPUTATION, TRAUMATIC"] or [mh ^AMPUTEES] or [mh ^"AMPUTA	
STUMPS"] or [mh ^"LIMB SALVAGE"]	
#49 ((spinal* or spine* or chest* or thoracic* or nerve*) near/3 injur*):ti	
#50 ((spinal* or spine*) near/3 cord* near/3 compress*):ti	
#51 ((Flail* or stove in) near/3 chest*):ti	
#52 (rib* near/3 fractur*):ti	
#53 ((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) near/3 plexus near/3 injur*):ti	
#54 (amputat* or amputee*):ti	
 #55 (limb* near/3 (loss or losing or lost or salvag* or re-construct* or reconstruct*)):ti #56 [mh ^"HEAD INJURIES, CLOSED"] or [mh ^"HEAD INJURIES, PENETRATING"] 	
#50 [IIII * HEAD INJURIES, CLOSED] OI [IIII * HEAD INJURIES, PENETRATING] #57 (head near/3 injur*):ti	
#57 (nead near/s injur).tr #58 #14 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #25 or #26 or #27 or #28 or #29 or #3	30 or #31 or
#32 or #33 or #34 or #35 or #37 or #39 or #40 or #41 or #42 or #44 or #45 or #46 or #47 or #48 or #4	
#51 or #52 or #53 or #54 or #55 or #56 or #57	
#59 [mh "BRAIN INJURIES"]	
#60 (brain near/3 injur*):ti,ab	
#61 #59 or #60	
#62 #58 not #61	
#63 [mh ^COSMETICS]	
#64 [mh ^"COSMETIC TECHNIQUES"]	
#65 camouflag*:ti,ab#66 cosmetics:ti,ab	
#67 #63 or #64 or #65 or #66	
#68 (Compassion* near/3 mind* near/3 (therap* or train*)):ti,ab	
#69 [mh ^"ACCEPTANCE AND COMMITMENT THERAPY"]	
#70 (Accept* near/3 commit* near/3 (therap* or train*)):ti,ab	
#71 [mh ^MINDFULNESS]	
#72 Mindfulness:ti,ab	
<pre>#73 ((Visualisation or visualization) near/3 (therap* or train*)):ti,ab</pre>	
#74 (mentalisation or mentalization):ti,ab	
#75 [mh ^"RELAXATION THERAPY"]	
#76 [mh ^"BREATHING EXERCISES"]	
 #77 ((Relax* or progressive* or breath*) near/3 (therap* or train* or exercis*)):ti,ab #78 [mh ^"COGNITIVE THERAPY"] 	
#70 [Infra COGNITIVE THERAFT] #79 (Cognit* near/3 behav* near/3 (therap* or train*)):ti,ab	
#80 CBT:ti,ab	
#81 [mh ^"MOTIVATIONAL INTERVIEWING"]	
#82 (motivat* near/3 interview*):ti,ab	
#83 #68 or #69 or #70 or #71 or #72 or #73 or #74 or #75 or #76 or #77 or #78 or #79 or #80 or #81 or #8	
#84 ([mh ^FAMILY] or [mh ^SPOUSES] or [mh ^GRANDPARENTS] or [mh PARENTS] or [mh ^SIBLINGS	
^CAREGIVERS]) and ([mh ^"SOCIAL SUPPORT"] or [mh ^COUNSELING] or [mh ^"DIRECTIVE CO	
or [mh ^EDUCATION] or [mh ^"HEALTH EDUCATION"] or [mh ^COMMUNICATION] or [mh "CONSU	JMER HEALTH
INFORMATION"]) #85 ((family or families or spouse* or wife or wives or buchand* or parents or parental or father or fathers	or mother or
#85 ((family or families or spouse* or wife or wives or husband* or parent* or parental or father or fathers	or mouner or

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
	mothers or grandparent* or grandfather* or grandmother* or sibling* or brother* or sister* or carer* or caregiver*) near/3 (support* or educat* or advice or advise* or advising or signpost* or sign post* or counsel* or informat* or communicat*)):ti
#86	((family or families) near/3 (support* or educat* or advice or advise* or advising or signpost* or sign post*)):ab
#87	#84 or #85 or #86
#88	[mh ^"SELF-MANAGEMENT"]
#89	[mh ^"SELF CARE"]
#90	[mh ^"SELF EFFICACY"]
#91	(self near/1 (manag* or care or help or responsib* or efficacy)):ti
#92	(self near/1 manag*):ab
#93	((fatigue* or depress*) near/3 (information or educat* or communicat* or advice or advise* or advising or counsel*)):ti,ab
#94	#88 or #89 or #90 or #91 or #92 or #93
#95	[mh ^GOALS]
#96	((patient* or person* or individual* or client* or user* or participant*) near/10 goal* near/3 (centre* or center* or plan* or set* or adjust* or rehab*)):ti,ab
#97	#95 or #96
#98	[mh ^"PLAY THERAPY"]
#99	(play* near/3 therap*):ti,ab
#100	#98 or #99
#101	[mh ^"FAMILY THERAPY"]
#102	(famil* near/3 therap*):ti,ab
#103	[mh ^SIBLINGS] and ([mh ^"SOCIAL SUPPORT"] or [mh ^COUNSELING] or [mh ^"DIRECTIVE COUNSELING"] or [mh ^EDUCATION] or [mh ^"HEALTH EDUCATION"] or [mh ^COMMUNICATION] or [mh "CONSUMER HEALTH INFORMATION"])
#104	((sibling* or brother* or sister*) near/3 (support* or educat* or advice or advise* or advising or signpost* or sign post* or counsel* or informat* or communicat*)):ti,ab
#105	#101 or #102 or #103 or #104
#106	[mh ^"PROBLEM BEHAVIOR"]
#107	((intervention* or therapy or therapies) near/3 (adapt* or behavio*)):ti,ab
#108	#106 or #107
#109	#62 and #67
#110	#62 and #83
#111	#62 and #87
#112	#62 and #94
#113	#62 and #97
#114	#11 and #62 and #100
#115	#11 and #62 and #105
#116	#11 and #62 and #108
#117	#109 or #110 or #111 or #112 or #113 or #114 or #115 or #116
#118	#109 or #110 or #111 or #112 or #113 or #114 or #115 or #116 with Cochrane Library publication date Between Jan 1995 and Aug 2019, in Cochrane Reviews
#119	#109 or #110 or #111 or #112 or #113 or #114 or #115 or #116 with Publication Year from 1995 to 2019, in Trials

1

2 Databases: Psycinfo

3 Date of last search: 19/08/2019

|--|

1	(adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab.
2	(child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab.
3	(infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab.
4	PEDIATRICS/ or PUBERTY/
5	(p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab.
6	or/1-5
7	(exp INJURIES/ not BIRTH INJURIES/) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED PATIENTS/ or HOSPITALS/ or exp INTENSIVE CARE/ or REHABILITATION CENTERS/)
8	(exp INJURIES/ not BIRTH INJURIES/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or centre?))).ti,ab.
9	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
10	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
11	(patient? adj5 trauma\$).ti,ab.
12	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
10	

13 wound\$ patient?.ti,ab.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

# 14	Searches injur\$ patient?.ti,ab.
14	accident\$ patient?.ti,ab.
16	(exp INJURIES/ not BIRTH INJURIES/) and trauma\$.ti,ab.
17	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
18	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
19	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
20	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
20	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
22	(cute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
23	(polytrauma? or poly-trauma?).ti,ab.
23	traumatolog\$.ti,ab.
25	exp ACCIDENTS/ and (exp INJURIES/ not BIRTH INJURIES/)
26	exp ACCIDENTS/ and (exp involves/ not birth involves/) exp ACCIDENTS/ and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti,ab.
20	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
28	(accident? adjo (injurio or woundo or radination burnet or burnet or haddart)).ti,ab.
29	exp ACCIDENTS/ and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED PATIENTS/ or
20	HOSPITALS/ or exp INTENSIVE CARE/ or REHABILITATION CENTERS/)
30	exp ACCIDENTS/ and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5
	(hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
31	SPINAL CORD INJURIES/
32	AMPUTATION/
33	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
34	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
35	((Flail\$ or stove in) adj3 chest?).ti.
36	(rib? adj3 fractur\$).ti.
37	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
38	(amputat\$ or amputee?).ti.
39	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
40	HEAD INJURIES/
41	(head adj3 injur\$).ti.
42	or/7-41
43	exp BRAIN INJURIES/
44	(brain adj3 injur\$).ti,ab.
45	or/43-44
46	42 not 45
47	COSMETIC TECHNIQUES/
48	camouflag\$.ti,ab.
49	cosmetics.ti,ab.
50	or/47-49
51	(Compassion\$ adj3 mind\$ adj3 (therap\$ or train\$)).ti,ab.
52	"ACCEPTANCE AND COMMITMENT THERAPY"/
53	(Accept\$ adj3 commit\$ adj3 (therap\$ or train\$)).ti,ab.
54	MINDFULNESS/
55	MINDFULNESS-BASED INTERVENTIONS/
56	Mindfulness.ti,ab.
57	IMAGERY/
58	(Visuali?ation adj3 (therap\$ or train\$)).ti,ab.
59	MENTALIZATION/
60	mentali?ation.ti,ab.
61	exp RELAXATION THERAPY/
62	RESPIRATION/ and EXERCISE/
63	((Relax\$ or progressive\$ or breath\$) adj3 (therap\$ or train\$ or exercis\$)).ti,ab.
64	COGNITIVE BEHAVIOR THERAPY/
65	(Cognit\$ adj3 behav\$ adj3 (therap\$ or train\$)).ti,ab.
66	CBT.ti,ab.
67	MOTIVATIONAL INTERVIEWING/
68	(motivat\$ adj3 interview\$).ti,ab.
69	or/51-68
70	(FAMILY/ or SPOUSES/ or HUSBANDS/ or WIVES/ or GRANDPARENTS/ or PARENTS/ or FATHERS/ or
	MOTHERS/ or SIBLINGS/ or BROTHERS/ or SISTERS/ or CAREGIVERS/) and (SOCIAL SUPPORT/ or COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or COMMUNICATION/)
71	((family or families or spouse? or wife or wives or husband? or parent? or parental or father? or mother? or grandparent? or grandfather? or grandmother? or sibling? or brother? or sister? or carer? or caregiver?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or
	communicat\$)).ti.
72	((family or families) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$)).ab.
73	or/70-72
74	exp SELF-MANAGEMENT/
75	SELF-CARE SKILLS/
76 77	SELF-EFFICACY/ (self adj1 (manag\$ or care or help or responsib\$ or efficacy)).ti.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
78	(self adj1 manag\$).ab.
79	((fatigue? or depress\$) adj3 (information or educat\$ or communicat\$ or advice or advise? or advising or counsel\$)).ti,ab.
80	or/74-79
81	CLIENT CENTERED THERAPY/
82	GOALS/
83	GOAL SETTING/
84	GOAL ORIENTATION/
85	((patient? or person\$ or individual\$ or client? or user? or participant?) adj10 goal? adj3 (centre\$ or center\$ or plan\$ or set\$ or adjust\$ or rehab\$)).ti,ab.
86	or/81-85
87	PLAY THERAPY/
88	(play\$ adj3 therap\$).ti,ab.
89	or/87-88
90	exp FAMILY THERAPY/
91	(famil\$ adj3 therap\$).ti.ab.
92	(SIBLINGS/ or BROTHERS/ or SISTERS/) and (SOCIAL SUPPORT/ or COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or COMMUNICATION/)
93	((sibling? or brother? or sister?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti.ab.
94	or/90-93
95	ADAPTATION/
96	ADJUSTMENT/
97	EMOTIONAL ADJUSTMENT/
98	SOCIAL ADJUSTMENT/
99	BEHAVIOR PROBLEMS/
100	((intervention? or therapy or therapies) adj3 (adapt\$ or behavio\$)).ti,ab.
101	or/95-100
102	46 and 50
103	46 and 69
104	46 and 73
105	46 and 80
106	46 and 86
107	6 and 46 and 89
108	6 and 46 and 94
109	6 and 46 and 101
110	or/102-109
111	limit 110 to english language
112	limit 111 to yr="1995 -Current"
113	limit 112 to ("0100 journal" or "0110 peer-reviewed journal" or "0120 non-peer-reviewed journal")

1

2 Health economics search strategies

3 Databases: Medline; Medline EPub Ahead of Print; and Medline In-Process &

Other Non-Indexed Citations 4

5 Date of last search: 19/08/2019

#	Searches
1	ECONOMICS/
2	VALUE OF LIFE/
3	exp "COSTS AND COST ANALYSIS"/
4	exp ECONOMICS, HOSPITAL/
5	exp ECONOMICS, MEDICAL/
6	exp RESOURCE ALLOCATION/
7	ECONOMICS, NURSING/
8	ECONOMICS, PHARMACEUTICAL/
9	exp "FEES AND CHARGES"/
10	exp BUDGETS/
11	budget*.ti,ab.
12	cost*.ti,ab.
13	(economic* or pharmaco?economic*).ti,ab.
14	(price* or pricing*).ti,ab.
15	(financ* or fee or fees or expenditure* or saving*).ti,ab.
16	(value adj2 (money or monetary)).ti,ab.
17	resourc* allocat*.ti,ab.
18	(fund or funds or funding* or funded).ti,ab.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Saarahaa
#	Searches
19 20	(ration or rations or rationing* or rationed).ti,ab. ec.fs.
20	or/1-20
22	ADOLESCENT/ or MINORS/
23	(adolescen\$ or teen\$ or vouth\$ or voung or iuvenile? or minors or highschool\$).ti.ab.iw.nw.
24	exp CHILD/
25	(child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or
20	girl?).ti,ab,jw,nw.
26	exp INFANT/
27	(infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jw,nw.
28	exp PEDIATRICS/ or exp PUBERTY/
29	(p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jw,nw.
30	or/22-29
31	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
32	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
33	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
34	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
35	(patient? adj5 trauma\$).ti,ab.
36	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
37	wound\$ patient?.ti,ab.
38	injur\$ patient? ti,ab.
39 40	accident\$ patient?.ti,ab. (exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or
40	exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ti. (exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ti.
42	exp MULTIPLE TRAUMA/
42	TRAUMATOLOGY/
43 44	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
44	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
46	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
47	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
48	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
49	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
50	(polytrauma? or poly-trauma?).ti,ab.
51	traumatolog\$.ti,ab.
52	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (exp *"WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/))
53	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
54	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
55	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
56	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
57	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
58 59	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab. *SPINAL CORD INJURIES/ or *SPINAL CORD COMPRESSION/
60	exp *THORACIC INJURIES/ or *ACUTE LUNG INJURY/
00	

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
61	*PERIPHERAL NERVE INJURIES/ or exp *CRANIAL NERVE INJURIES/
62	exp *AMPUTATION/ or *AMPUTATION, TRAUMATIC/ or *AMPUTEES/ or *AMPUTATION STUMPS/ or *LIMB SALVAGE/
63	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
64	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
65	((Flail\$ or stove in) adj3 chest?).ti.
66	(rib? adj3 fractur\$).ti.
67	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
68	(amputat\$ or amputee?).ti.
69	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
70	*HEAD INJURIES, CLOSED/ or *HEAD INJURIES, PENETRATING/
71	(head adj3 injur\$).ti.
72	or/31-71
73	exp BRAIN INJURIES/
74	(brain adj3 injur\$).ti,ab.
75	or/73-74
76	72 not 75
77	COSMETICS/
78	COSMETIC TECHNIQUES/
79	camouflag\$.ti,ab.
80	cosmetics.ti,ab.
81	or/77-80
82	(Compassion\$ adj3 mind\$ adj3 (therap\$ or train\$)).ti,ab.
83	"ACCEPTANCE AND COMMITMENT THERAPY"/
84	(Accept\$ adj3 commit\$ adj3 (therap\$ or train\$)).ti,ab.
85	MINDFULNESS/
86	Mindfulness.ti,ab.
87	(Visuali?ation adj3 (therap\$ or train\$)).ti,ab.
88	mentali?ation.ti,ab.
89	RELAXATION THERAPY/
90	BREATHING EXERCISES/
91	((Relax\$ or progressive\$ or breath\$) adj3 (therap\$ or train\$ or exercis\$)).ti,ab.
92	COGNITIVE BEHAVIORAL THERAPY/
93 94	(Cognit\$ adj3 behav\$ adj3 (therap\$ or train\$)).ti,ab. CBT.ti,ab.
94 95	MOTIVATIONAL INTERVIEWING/
95 96	(motivat\$ adj3 interview\$).ti,ab.
90 97	or/82-96
98	(FAMILY/ or SPOUSES/ or GRANDPARENTS/ or exp PARENTS/ or SIBLINGS/ or CAREGIVERS/) and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/)
99	((family or families or spouse? or wife or wives or husband? or parent? or parental or father? or mother? or grandparent? or grandfather? or grandmother? or sibling? or brother? or sister? or carer? or caregiver?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti.
100	((family or families) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$)).ab.
101	or/98-100
102	SELF-MANAGEMENT/
103	*SELF CARE/
104	*SELF EFFICACY/
105	(self adj1 (manag\$ or care or help or responsib\$ or efficacy)).ti.
106	(self adj1 manag\$).ab.
107	((fatigue? or depress\$) adj3 (information or educat\$ or communicat\$ or advice or advise? or advising or counsel\$)).ti,ab.
108	or/102-107
109	GOALS/
110	((patient? or person\$ or individual\$ or client? or user? or participant?) adj10 goal? adj3 (centre\$ or center\$ or plan\$ c set\$ or adjust\$ or rehab\$)).ti,ab.
111	or/109-110
112	PLAY THERAPY/
113	(play\$ adj3 therap\$).ti,ab.
114	or/112-113
115	FAMILY THERAPY/
116 117	(famil\$ adj3 therap\$).ti,ab. SIBLINGS/ and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/)
118	((sibling? or brother? or sister?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti,ab.
119	or/115-118
120	PROBLEM BEHAVIOR/

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
122	or/120-121
123	76 and 81
124	76 and 97
125	76 and 101
126	76 and 108
127	76 and 111
128	30 and 76 and 114
129	30 and 76 and 119
130	30 and 76 and 122
131	or/123-130
132	limit 131 to english language
133	limit 132 to yr="1995 -Current"
134	LETTER/
135	EDITORIAL/
136	NEWS/
137	exp HISTORICAL ARTICLE/
138	ANECDOTES AS TOPIC/
139	COMMENT/
140	CASE REPORT/
141	(letter or comment*).ti.
142	or/134-141
143	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
144	142 not 143
145	ANIMALS/ not HUMANS/
146	exp ANIMALS, LABORATORY/
147	exp ANIMAL EXPERIMENTATION/
148	exp MODELS, ANIMAL/
149	exp RODENTIA/
150	(rat or rats or mouse or mice).ti.
151	or/144-150
152	133 not 151
153	21 and 152

1

2 Databases: Embase; and Embase Classic

3 Date of last search: 19/08/2019

#	Searches
1	HEALTH ECONOMICS/
2	exp ECONOMIC EVALUATION/
3	exp HEALTH CARE COST/
4	exp FEE/
5	BUDGET/
6	FUNDING/
7	RESOURCE ALLOCATION/
8	budget*.ti,ab.
9	cost*.ti,ab.
10	(economic* or pharmaco?economic*).ti,ab.
11	(price* or pricing*).ti,ab.
12	(financ* or fee or fees or expenditure* or saving*).ti,ab.
13	(value adj2 (money or monetary)).ti,ab.
14	resourc* allocat*.ti,ab.
15	(fund or funds or funding* or funded).ti,ab.
16	(ration or rations or rationing* or rationed).ti,ab.
17	or/1-16
18	exp ADOLESCENT/
19	(adolescen\$ or teen\$ or youth\$ or young or juvenile? or minors or highschool\$).ti,ab,jx.
20	exp CHILD/
21	(child\$ or schoolchild\$ or "school age" or "school aged" or preschool\$ or toddler\$ or kid? or kindergar\$ or boy? or girl?).ti,ab,jx.
22	exp INFANT/
23	(infan\$ or neonat\$ or newborn\$ or baby or babies).ti,ab,jx.
24	exp PEDIATRICS/ or exp PUBERTY/
25	(p?ediatric\$ or pubert\$ or prepubert\$ or pubescen\$ or prepubescen\$).ti,ab,jx,ec.
26	or/18-25
27	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
	PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp
	INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
28	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or centre?))).ti,ab.
29	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
30	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
31	(patient? adj5 trauma\$).ti,ab.
32	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
33	wound\$ patient?.ti,ab.
34	injur\$ patient?.ti,ab.
35	accident\$ patient?.ti,ab.
36	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ti.
37	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ab. /freq=2
38	MULTIPLE TRAUMA/
39	TRAUMATOLOGY/
40	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
41	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
42	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
43	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
44	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
45	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
46	(polytrauma? or poly-trauma?).ti,ab.
47	
48	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/))
49	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
50	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
51	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
52	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
53	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
54	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or centre?))).ti,ab.
55	*SPINAL CORD INJURY/ or *SPINAL CORD COMPRESSION/
56	exp *THORAX INJURY/ or *ACUTE LUNG INJURY/ or exp *RIB FRACTURE/
57	exp *NERVE INJURY/
58	exp *AMPUTATION/ or *AMPUTEE/ or *LIMB SALVAGE/
59 60	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
60 61	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti. ((Flail\$ or stove in) adj3 chest?).ti.
62	(rials of stove in) adjs chest ().u. (rib? adj3 fractur\$).ti.
02	

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
63	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
64	(amputat\$ or amputee?).ti.
65	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
66 67	*HEAD INJURY/ (head adj3 injur\$).ti.
67 68	or/27-67
69	exp BRAIN INJURY/
70	(brain adj3 injur\$).ti,ab.
71	or/69-70
72	68 not 71
73	*COSMETIC/
74	*ESTHETIC SURGERY/
75	camouflag\$.ti,ab.
76	cosmetics.ti,ab.
77	or/73-76
78 79	(Compassion\$ adj3 mind\$ adj3 (therap\$ or train\$)).ti,ab. *"ACCEPTANCE AND COMMITMENT THERAPY"/
79 80	(Accept\$ adj3 commit\$ adj3 (therap\$ or train\$)).ti,ab.
81	*MINDFULNESS/
82	Mindfulness.ti,ab.
83	(Visuali?ation adj3 (therap\$ or train\$)).ti,ab.
84	mentali?ation.ti,ab.
85	*RELAXATION TRAINING/
86	*BREATHING EXERCISE/
87	((Relax\$ or progressive\$ or breath\$) adj3 (therap\$ or train\$ or exercis\$)).ti,ab.
88	*COGNITIVE BEHAVIORAL THERAPY/
89	(Cognit\$ adj3 behav\$ adj3 (therap\$ or train\$)).ti,ab. CBT.ti,ab.
90 91	*MOTIVATIONAL INTERVIEWING/
91	(motivat\$ adj3 interview\$).ti,ab.
93	or/78-92
94	(FAMILY/ or exp SPOUSE/ or exp GRANDPARENT/ or PARENT/ or FATHER/ or MOTHER/ or exp SIBLING/ or
	CAREGIVER/) and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or INTERPERSONAL COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/)
95	((family or families or spouse? or wife or wives or husband? or parent? or parental or father? or mother? or grandparent? or grandfather? or grandmother? or sibling? or brother? or sister? or carer? or caregiver?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti.
96	((family or families) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$)).ab.
97	or/94-96
98	*SELF CARE/
99	(self adj1 (manag\$ or care or help or responsib\$ or efficacy)).ti.
100	(self adj1 manag\$).ab.
101 102	((fatigue? or depress\$) adj3 (information or educat\$ or communicat\$ or advice or advise? or advising or counsel\$)).ti,ab. or/98-101
102	*MOTIVATION/
103	GOAL ATTAINMENT/
105	((patient? or person\$ or individual\$ or client? or user? or participant?) adj10 goal? adj3 (centre\$ or center\$ or plan\$ or set\$ or adjust\$ or rehab\$)).ti,ab.
106	or/103-105
107	PLAY THERAPY/
108	(play\$ adj3 therap\$).ti,ab.
109	or/107-108
110 111	FAMILY THERAPY/
112	(famil\$ adj3 therap\$).ti,ab. exp SIBLING/ and (SOCIAL SUPPORT/ or COUNSELING/ or DIRECTIVE COUNSELING/ or *EDUCATION/ or *HEALTH EDUCATION/ or INTERPERSONAL COMMUNICATION/ or exp CONSUMER HEALTH INFORMATION/)
113	((sibling? or brother? or sister?) adj3 (support\$ or educat\$ or advice or advise? or advising or signpost\$ or sign post\$ or counsel\$ or informat\$ or communicat\$)).ti,ab.
114	or/110-113
115	PROBLEM BEHAVIOR/
116	((intervention? or therapy or therapies) adj3 (adapt\$ or behavio\$)).ti,ab.
117	or/115-116
118	72 and 77
119	72 and 93
120	72 and 97
121	72 and 102
122 123	72 and 106 26 and 72 and 109
123	26 and 72 and 109 26 and 72 and 114
124	

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
125	26 and 72 and 117
126	or/118-125
127	limit 126 to english language
128	limit 127 to yr="1995 -Current"
129	letter.pt. or LETTER/
130	note.pt.
131	editorial.pt.
132	CASE REPORT/ or CASE STUDY/
133	(letter or comment*).ti.
134	or/129-133
135	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
136	134 not 135
137	ANIMAL/ not HUMAN/
138	NONHUMAN/
139	exp ANIMAL EXPERIMENT/
140	exp EXPERIMENTAL ANIMAL/
141	ANIMAL MODEL/
142	exp RODENT/
143	(rat or rats or mouse or mice).ti.
144	or/136-143
145	128 not 144

146 17 and 145

1

2 Database: Cochrane Central Register of Controlled Trials

3 Date of last search: 19/08/2019

#	Searches
#1	MeSH descriptor: [Economics] this term only
#2	MeSH descriptor: [Value of Life] this term only
#3	MeSH descriptor: [Costs and Cost Analysis] explode all trees
#4	MeSH descriptor: [Economics, Hospital] explode all trees
#5	MeSH descriptor: [Economics, Medical] explode all trees
#6	MeSH descriptor: [Resource Allocation] explode all trees
#7	MeSH descriptor: [Economics, Nursing] this term only
#8	MeSH descriptor: [Economics, Pharmaceutical] this term only
#9	MeSH descriptor: [Fees and Charges] explode all trees
#10	MeSH descriptor: [Budgets] explode all trees
#11	budget*:ti,ab
#12	cost*:ti,ab
#13	(economic* or pharmaco?economic*):ti,ab
#14	(price* or pricing*):ti,ab
#15	(financ* or fees or expenditure* or saving*):ti,ab
#16	(value near/2 (money or monetary)):ti,ab
#17	resourc* allocat*:ti,ab
#18	(fund or funds or funding* or funded):ti,ab
#19	(ration or rations or rationing* or rationed) .ti,ab.
#20	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19
#21	[mh ^ADOLESCENT]
#22	[mh ^MINORS]
#23	(adolescen* or teen* or youth* or young or juvenile* or minors or highschool*):ti,ab
#24	[mh CHILD]
#25	(child* or schoolchild* or "school age" or "school aged" or preschool* or toddler* or kid* or kindergar* or boy* or girl*):ti,ab
#26	[mh INFANT]
#27	(infan* or neonat* or newborn* or baby or babies):ti,ab
#28	[mh PEDIATRICS]
#29	[mh PUBERTY]
#30	(pediatric* or paediatric* or pubert* or prepubert* or pubescen* or prepubescen*):ti,ab
#31	#21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30
#32	([mh "WOUNDS AND INJURIES"] not ([mh ^ASPHYXIA] or [mh ^"BATTERED CHILD SYNDROME"] or [mh "BIRTH INJURIES"] or [mh "BITES AND STINGS"] or [mh DROWNING] or [mh ^"EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"] or [mh ^FROSTBITE] or [mh "HEAT STRESS DISORDERS"] or [mh "RADIATION INJURIES"] or [mh ^RETROPNEUMOPERITONEUM] or [mh ^"SURGICAL WOUND"]))
#33	([mh ^HOSPITALIZATION] or [mh ^"PATIENT ADMISSION"] or [mh ^"ADOLESCENT, HOSPITALIZED"] or [mh ^"CHILD, HOSPITALIZED"] or [mh HOSPITALS] or [mh "EMERGENCY SERVICE, HOSPITAL"] or [mh "INTENSIVE CARE UNITS"] or [mh ^"REHABILITATION CENTERS"])

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches
#34	#32 and #33
#35	(hospitalised or hospitalized or hospitalistion* or hospitaliztion* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or centre*))):ti,ab
#36	#32 and #35
¥37	((hospitalised or hospitalized or hospitalistion* or hospitaliztion*) near/10 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#38	((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*) near/5 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#39	(patient* near/5 trauma*):ti,ab
#40	(patient* near/3 (burn* or burned or fractur*)):ti,ab
#41	"wound* patient*":ti,ab
#42	"injur* patient*":ti,ab
#43 #44	"accident* patient*":ti,ab trauma*:ti,ab
#44 #45	#32 and #44
#43 #46	[mh "MULTIPLE TRAUMA"]
#47	[mh ^TRAUMATOLOGY]
#48	(trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab
# 49	((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#50	(trauma* near/3 (severe or severely or major or multiple)):ti,ab
#51	((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab
#52	((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#53	(acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab
#54 #55	(polytrauma* or poly-trauma*):ti,ab
#55 #56	traumatolog*:ti,ab
#56 #57	([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"]) #32 and #56
#58	(injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab
#59	#56 and #58
#60	(accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#61	(accident* near/3 (serious* or severe or severely or major)):ti,ab
#62	#33 and #56
#63	(hospitalised or hospitalized or hospitalistion* or hospitaliztion* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or intensive care or ICU* or PICU* or NICU* or department* or centre* or center*))):ti,ab
#64	
#65 #66	[mh ^"SPINAL CORD INJURIES"] or [mh ^"SPINAL CORD COMPRESSION"] [mh "THORACIC INJURIES"] or [mh ^"ACUTE LUNG INJURY"]
#00 #67	[mh ^"PERIPHERAL NERVE INJURIES"] or [mh "CRANIAL NERVE INJURIES"]
#68	[mh AMPUTATION] or [mh ^"AMPUTATION, TRAUMATIC"] or [mh ^AMPUTEES] or [mh ^"AMPUTATION STUMPS"] or [mh ^"LIMB SALVAGE"]
#69	((spinal* or spine* or chest* or thoracic* or nerve*) near/3 injur*):ti
#70	((spinal* or spine*) near/3 cord* near/3 compress*):ti
#71	((Flail* or stove in) near/3 chest*):ti
#72 #72	(rib* near/3 fractur*):ti
#73 #74	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) near/3 plexus near/3 injur*):ti
#74 #75	(amputat* or amputee*):ti (limb* near/3 (loss or losing or lost or salvag* or re-construct* or reconstruct*)):ti
#75 #76	[mh ^"HEAD INJURIES, CLOSED"] or [mh ^"HEAD INJURIES, PENETRATING"]
#77	(head near/3 injur*):ti
#78	#34 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54 or #55 or #57 or #59 or #60 or #61 or #62 or #64 or #65 or #66 or #67 or #68 or #69 or #70 or #71 or #72 or #73 or #74 or #75 or #76 or #77
¥79	[mh "BRAIN INJURIES"]
#80	(brain near/3 injur*):ti,ab
# 81	#79 or #80
#82	#78 not #81
¥83	[mh ^COSMETICS]
#84	[mh ^"COSMETIC TECHNIQUES"]
#85 #86	camouflag*:ti,ab
#86 #87	cosmetics:ti,ab #83 or #84 or #85 or #86
787 488	(Compassion* near/3 mind* near/3 (therap* or train*)):ti,ab
+oo #89	[mh ^"ACCEPTANCE AND COMMITMENT THERAPY"]
4 03 #90	(Accept* near/3 commit* near/3 (therap* or train*)):ti,ab
#91	[mh ^MINDFULNESS]
#92	Mindfulness:ti,ab
#93	((Visualisation or visualization) near/3 (therap* or train*)):ti,ab
#94	(mentalisation or mentalization):ti,ab
#95	[mh ^"RELAXATION THERAPY"]

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

#	Searches					
#96	[mh ^"BREATHING EXERCISES"]					
#97	((Relax* or progressive* or breath*) near/3 (therap* or train* or exercis*)):ti,ab					
#98	[mh ^"COGNITIVE THERAPY"]					
#99	(Cognit* near/3 behav* near/3 (therap* or train*)):ti,ab					
#100	CBT:ti,ab					
#101	[mh ^"MOTIVATIONAL INTERVIEWING"]					
#102	(motivat* near/3 interview*):ti,ab					
#103	#88 or #89 or #90 or #91 or #92 or #93 or #94 or #95 or #96 or #97 or #98 or #99 or #100 or #101 or #102					
#103	([mh ^FAMILY] or [mh ^SPOUSES] or [mh ^GRANDPARENTS] or [mh PARENTS] or [mh ^SIBLINGS] or [mh ^CONSELING] or [mh ^CONSELING] or [mh ^CONSELING] or [mh ^CONSELING] or [mh ^CONSUMER HEALTH EDUCATION] or [mh ^CONSUMER HEALTH INFORMATION"])					
#105	((family or families or spouse* or wife or wives or husband* or parent* or parental or father or fathers or mother or mothers or grandparent* or grandfather* or grandmother* or sibling* or brother* or sister* or carer* or caregiver*) near/3 (support* or educat* or advice or advise* or advising or signpost* or sign post* or counsel* or informat* or communicat*)):ti					
#106	((family or families) near/3 (support* or educat* or advice or advise* or advising or signpost* or sign post*)):ab					
#107	#104 or #105 or #106					
#108	[mh ^"SELF-MANAGEMENT"]					
#109	[mh ^"SELF CARE"]					
#110	[mh ^"SELF EFFICACY"]					
#111	(self near/1 (manag* or care or help or responsib* or efficacy)):ti					
#112	(self near/1 manag*):ab					
#113	((fatigue* or depress*) near/3 (information or educat* or communicat* or advice or advise* or advising or counsel*)):ti,ab					
#114	#108 or #109 or #110 or #111 or #112 or #113					
#115	Imh ^GOALS1					
#116	((patient* or person* or individual* or client* or user* or participant*) near/10 goal* near/3 (centre* or center* or plan* or set* or adjust* or rehab*)):ti,ab					
#117	#115 or #116					
#118	[mh ^"PLAY THERAPY"]					
#119						
#120	#118 or #119					
#121	[mh ^"FAMILY THERAPY"]					
#122	(famil* near/3 therap*):ti,ab					
#123	[mh ^SIBLINGS] and ([mh ^"SOCIAL SUPPORT"] or [mh ^COUNSELING] or [mh ^"DIRECTIVE COUNSELING"] or [mh ^EDUCATION] or [mh ^"HEALTH EDUCATION"] or [mh ^COMMUNICATION] or [mh "CONSUMER HEALTH INFORMATION"])					
#124	((sibling* or brother* or sister*) near/3 (support* or educat* or advice or advise* or advising or signpost* or sign post* or counsel* or informat* or communicat*)):ti,ab					
#125	#121 or #122 or #123 or #124					
#126	[mh ^"PROBLEM BEHAVIOR"]					
#127	((intervention* or therapy or therapies) near/3 (adapt* or behavio*)):ti,ab					
#128	#126 or #127					
#129	#82 and #87					
#130	#82 and #103					
#131	#82 and #107					
#132	#82 and #114					
#133	#82 and #117					
#134	#31 and #82 and #120					
#135	#31 and #82 and #125					
#136	#31 and #82 and #128					
#137	#129 or #130 or #131 or #132 or #133 or #134 or #135 or #136					
#138	#129 or #130 or #131 or #132 or #133 or #134 or #135 or #136 with Publication Year from 1995 to 2019, in Trials					
#139	#20 and #138					
1100						

1

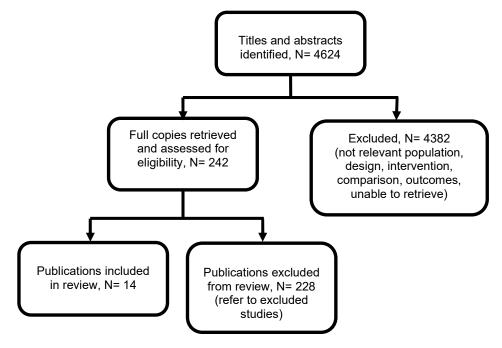
2

1 Appendix C – Clinical evidence study selection

- 2 Clinical study selection for review questions:
- 3 B.3a What psychological and psychosocial rehabilitation interventions are
- effective and acceptable for adults with complex rehabilitation needs after
 traumatic injury?
- 6 **B.3b** What psychological and psychosocial rehabilitation interventions are
- 7 effective and acceptable for children and young people with complex
- 8 rehabilitation needs after traumatic injury?)
- 9 A combined search was conducted for both review questions

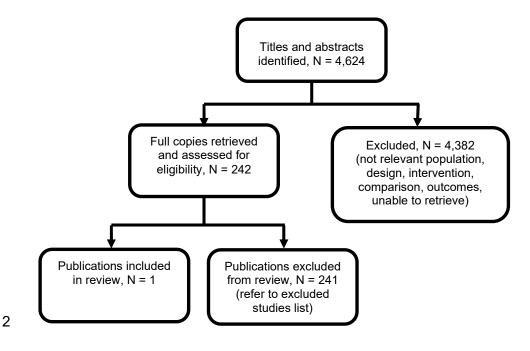
10 Figure 1: Study selection flow chart: Adults

11



DRAFT FOR CONSULTATION Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

1 Figure 2: Study selection flow chart: Children and young people



1 Appendix D – Clinical evidence tables

2 Clinical evidence tables for review question: B.3a What psychological and psychosocial rehabilitation interventions are

3 effective and acceptable for adults with complex rehabilitation needs after traumatic injury?

4 Table 7: Clinical evidence tables

Study details	Participants	Interventions	Outcomes and Results	Comments
Full citation	Sample size	Interventions	Results	Limitations
Allegrante, J. P., Peterson, M. G., Cornell, C. N., MacKenzie, C. R., Robbins, L., Horton, R., Ganz, S. B., Ruchlin, H. S., Russo, P. W., Paget, S. A., Charlson, M. E., Methodological challenges of multiple- component intervention: lessons learned from a randomized controlled trial of functional recovery after hip fracture, Hss j, 3, 63-70, 2007	 N= 176 (randomised) Motivation and support: 90 Standard post-operative care: 86 N= 59 (analysed) Motivation and support: 32 Standard post-operative care: 27 Characteristics Age in years [Mean (SD)]: Motivation and support = 78 (7) 	 All eligible participants were recruited either 4th or 5th day after hip surgery. Informed consent was gotten, and baseline assessment taken. <i>Control group</i> Standard post-operative care and rehabilitation services offered by hospital, including weight-bearing on fractured hip along with routine range -of-motion and strengthening exercises. As an attention control measure, control participants received supportive telephone schedule post-discharge very similar to intervention. 	Quality of life (SF-36 Physical functioning) [mean (SD)] At 6 months: • Motivation and support: 50 (25) • Standard post-operative care: 45 (29) Quality of life (SF-36 General health domain) [mean (SD)]	Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) <u>Domain 1: Risk of bias</u> <u>arising from the randomisation process</u> 1.1 Was the allocation sequence random? Y – random number tables 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences
Ref Id 1118071	• Standard post-operative care = 77 (8)	 Intervention group Standard care plus intervention programme consisting of 	At 6 months: • Motivation and support: 74 (22)	between intervention groups suggest a problem with the randomisation process? PN
Country/ies where the study was carried out USA Study type RCT	 Gender (M/F): Motivation and support (N): 8/24 Standard post-operative care (N): 6/21 Time since injury in years: 	 Post-operative motivational videotape ('Getting Up Again, Getting Better') and corresponding patient information booklet given prior to discharge, primarily addressing fall prevention self- efficacy 	 Standard post-operative care: 68 (25) Quality of life (SF-36 Mental health) [mean (SD)] At 6 months: 	Risk-of-bias judgement: Low risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware

Study details	Participants	Interventions	Outcomes and Results	Comments
Aim of the study To assess the efficacy and safety of a multi- component intervention on functional outcomes following hip surgery. Study dates Not reported Source of funding This study received funding from the National Institute of Arthritis and Musculoskeletal and Skin Diseases.	not reported not reported Type of injury: not reported. Length of hospitalisation in days: not reported Inclusion criteria Participants had to: Be aged 65 years or older Have a primary unilateral fracture of the hip with a subsequent successful surgical repair Exclusion criteria Patient was unable to give informed consent or unable to give coherent responses to mental state examination Pathological cause of hip fracture Non-English speaking Exercise contra- indicated as determined by physician or diagnosis No access to telephone or cannot be reached by telephone Patient does not live in	 In-hospital support visit from a peer counsellor, designed to model successful recovery and provide social support 8 week outpatient individually tailored physical therapy programme, consisting of balance re-training, observational gait analysis and strength-training exercise. Post-operation, all patients received weekly support telephone calls until their first post-surgical visit (week 4-5). At this point, they were cleared to participate in physical therapy component of the intervention. 	 Motivation and support: 79 (12) Standard post-operative care: 72 (23) <i>Pain (SF-36 Bodily pain)</i> [mean (SD)] At 6 months: Motivation and support: 71 (23) Standard post-operative care: 71 (26) 	of their assigned intervention during the trial? PY 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? Y - only 10 participants received all components 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? No 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? PY 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> High risk

Study details Participants	Interventions	Outcomes and Results	Comments
New York tristate a were planning to re on discharge	a or		Domain 3: Missing outcome data3.1 Were data for this outcome available for all, or nearly all, participants randomised? No – outcome data only available for 32/90 in intervention group and

Study details	Participants	Interventions	Outcomes and Results	Comments
				 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants? PY - self assessed questionnaire 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? Y 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? PY <i>Risk-of-bias judgement:</i> High risk Domain 5: Risk of bias in selection of the reported result 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?

Study details	Participants	Interventions	Outcomes and Results	Comments
				PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i> Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information None.
Full citation Castillo, R. C., Wegener, S. T., Newell, M. Z., Carlini, A. R., Bradford, A. N., Heins, S. E., Wysocki, E., Pollak, A. N., Teter, H., Mackenzie, E. J., Improving outcomes at Level I trauma centers: An early evaluation of the trauma survivors network, Journal of Trauma and Acute Care Surgery, 74, 1534-1540, 2013 Ref Id 1093955 Country/ies where the study was carried out USA	Sample size N= 251 • Trauma Support Network: 126 • Standard care: 125 Characteristics Age in years [Mean (SD)]: • Trauma Support Network = 36.9 (14.1) • Standard care= 38.0 (12.5) Gender (M/F): • Trauma Support Network (N): 95/31 • Standard care (N): 44/81 Time since injury in years: not reported	 Interventions Trauma Support Network was implemented throughout the participating trauma centres and effectiveness was measured in a sample of participants meeting the inclusion criteria. Baseline assessments were conducted while participants were inpatients and follow-up via telephone. Control group Standard care from participating rehabilitation centres. No further information reported. Intervention group Standard care plus access to Trauma Support Network (TSN), which integrates 4 supportive platforms that are accessed through a customised information technology. Peer-support - peer visitation with TSN-trained individuals, trauma support groups and TSN website 	Results Quality of life (SF-12 Physical component score) [mean (SD)] At 6 months from baseline: • Trauma Support Network: 41.4 (11.9) • Standard care: 40.0 (12.9) Quality of life (SF-12 Mental component score) [mean (SD)] At 6 months from baseline: • Trauma Support Network group: 52.2 (15.0) • Standard care: 48.8 (15.1)	Limitations Quality assessment: Risk of bias assessed using Risk Of Bias In Non-randomized Studies of Interventions (ROBINS-I): Domain 1: Bias due to confounding 1.1 Is there potential for confounding of the effect of intervention in this study? Y 1.2. Was the analysis based on splitting participants' follow-up time according to intervention received? N If N/PN, answer questions relating to baseline confounding (1.4 to 1.6) If Y/PY, go to question 1.3. 1.4. Did the authors use an appropriate analysis method that controlled for all the important confounding domains? PY

Study details	Participants	Interventions	Outcomes and Results	Comments
 Study type Prospective and retrospective cohort study Aim of the study To evaluate the effectiveness of the Trauma Survivors Network, a psychosocial support intervention, on patient reported outcomes in orthopaedic trauma patients. Study dates Recruitment: control group 2008 to 2009; intervention group 2009 to 2010. Source of funding This study received funding from the Centers for Disease Control. 	 Inclusion criteria Participants had to be: Aged between 18 to 69 years' old Discharged alive Sustained one or more extremity injuries No serious brain injury (defined as an Abbreviated Injury Scale score of above 3) English speaking Not in jail or homeless Computer literate, with access to a computer at home, work or school Exclusion criteria Not reported. See above for inclusion criteria. 	 Self-management - NextSteps is the TSN self-management course, which is focused in engaging participants as active partners in their recovery. This is done through increasing problem-solving skills, forming relationships with healthcare providers and goal setting. Information and resources - accessed through a handbook and TSN website. Provider training - educate healthcare providers on the TSN through staff meetings, hospital in-services and educational presentations. 	Changes in mood (BSI score for anxiety) [mean(SD)] At 6 months from baseline • Trauma Support Network: 4.3 (0.8) • Standard care: 4.3 (0.7) Changes in mood (PHQ-9 depression score) [mean (SD)] At 6 months from baseline: • Trauma Support Network: 6.1 (6.0) • Standard care: 8.3 (6.5)	 1.5. If Y/PY to 1.4: Were confounding domains that were controlled for measured validly and reliably by the variables available in this study? PY 1.6. Did the authors control for any post-intervention variables that could have been affected by the intervention? N Questions relating to baseline and time-varying confounding 1.7. Did the authors use an appropriate analysis method that controlled for all the important confounding domains and for time-varying confounding? 1.8. If Y/PY to 1.7: Were confounding domains that were controlled for measured validly and reliably by the variables available in this study? <i>Risk of bias:</i> Some concerns Domain 2: Bias in selection of participants into the study (or into the analysis) based on participant characteristics observed after the start of intervention? N

Study details	Participants	Interventions	Outcomes and Results	Comments
Study details	Participants	Interventions	Outcomes and Results	Comments22.4. Do start of follow-up and start of intervention coincide for most participants? PN - evaluation group was enrolled between 2009 and 2010 following the programme start.2.5. If Y/PY to 2.2 and 2.3, or N/PN to 2.4: Were adjustment techniques used that are likely to correct for the presence of selection biases? N <i>Risk of bias:</i> High risk Domain 3: Bias in classification of interventions 3.1 Were intervention groups clearly defined? PN - possibility that some control participants were exposed to intervention3.2 Was the information used to define intervention groups recorded at the start of the intervention? PY3.3 Could classification of intervention status have been affected by knowledge of the outcome or risk of the outcome? PN <i>Risk of bias:</i> High risk Domain 4: Bias due to deviations from intended interventions4.1. Were there deviations from the intended

Study details	Participants	Interventions	Outcomes and Results	Comments
				intervention beyond what would be expected in usual practice? Y- use of TSN resource ranged from 3- 27%. Additionally, Next Steps only ran once during experimental period and was not well attended. 4.2. If Y/PY to 4.1: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome? PY <i>Risk of bias:</i> High risk Domain 5: Bias due to missing data 5.1 Were outcome data available for all, or nearly all, participants? No – only 75.5% participants followed up (74% intervention and 77% control) 5.2 Were participants excluded due to missing data on intervention status? PN 5.3 Were participants excluded due to missing data on other variables needed for the analysis? NI 5.4 If PN/N to 5.1, or Y/PY to 5.2 or 5.3: Are the proportion of participants and reasons for missing data similar across interventions? NI - proportions similar but no

Study details	Participants	Interventions	Outcomes and Results	Comments
				information on reasons 5.5 If PN/N to 5.1, or Y/PY to 5.2 or 5.3: Is there evidence that results were robust to the presence of missing data? NI <i>Risk of bias:</i> High risk <u>Domain 6: Bias in</u> measurement of outcomes 6.1 Could the outcome measure have been influenced by knowledge of the intervention received? PY 6.2 Were outcome assessors aware of the intervention received by study participants? Y - self assessment 6.3 Were the methods of outcome assessment comparable across intervention groups? Y 6.4 Were any systematic errors in measurement of the outcome related to intervention received? PN <i>Risk of bias:</i> Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information None.
Full citation	Sample size	Interventions	Results	Limitations

Study details	Participants	Interventions	Outcomes and Results	Comments
Coker, J., Cuthbert, J., Ketchum, J. M., Holicky, R., Huston, T., Charlifue, S., Re-inventing yourself after spinal cord injury: a site-specific randomized clinical trial, Spinal Cord, 57, 282-292, 2019 Ref Id 1021091 Country/ies where the study was carried out USA Study type RCT Aim of the study This RCT aimed to compare the effect of a self-efficacy group treatment programme to no treatment in adults after acute spinal cord injury (SCI). Study dates Recruitment: October 2011 to November 2015 Source of funding Funded by a grant from National Institute on Disability and Rehabilitation Research/National	N= 81 (randomised) • Therapeutic intervention programme: 41 • Waitlist control: 40 N= 81 (analysed) • Therapeutic intervention programme: 41 • Waitlist control: 40 Characteristics Age in years [Mean (SD)]: • Therapeutic intervention programme: = 48.0 (12.8) • Waitlist control = 52.0 (15.3) Gender (M/F): • Therapeutic intervention programme (N): 34/7 • Waitlist control (N): 32/8 Time since injury: Not reported Level of injury (AIS grade A/B/C/D): • Therapeutic intervention programme (N): 19/2/7/13 • Waitlist control (N): 19/2/7/13	 Control Group: Waitlist control. Intervention group: 'Re- inventing Yourself after SCI' - a manual-based, educationally- based group therapeutic intervention programme consisting of 2 hour weekly sessions for 6 weeks. 8 specific skills were presented over the course, designed to re-frame the way an individual looks at events, build their confidence and developing ways to express positive attitude. These skills were taught in a schedule, designed to progress from introductory concepts to more complex ones. Each session was led by trained group facilitators (including a physical therapist, a nurse, a social worker, and an individual with SCI) and included presentations, goal setting and group discussion. Tasks were also assigned to be completed at home between sessions. 	Changes in mood (PHQ-9) [mean (SE)] After intervention completion (week 6): • Therapeutic intervention programme: 7.19 (0.87) • Control (waitlist): 6.83 (0.85) 24 weeks follow-up from baseline (week 30): • Therapeutic intervention programme: 7.18 (0.88) • Control (waitlist): 6.58 (0.85)	Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomization process 1.1 Was the allocation sequence random? Y – group blocked randomisation by statistician in groups of 17 participants 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences between intervention groups suggest a problem with the randomization process? PN - no statistical analysis presented but visibly appear similar Risk-of-bias judgement Low risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware of their assigned intervention during the trial? Y 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY - not possible to

Study details	Participants	Interventions	Outcomes and Results	Comments
Institute on Disability, Independent Living, and Rehabilitation Research.	Type of SCI (motor complete/incomplete) • Therapeutic intervention programme (N): 19/22 • Waitlist control (N): 16/24 Inclusion criteria Participants had to: • be 18 years old or over at enrolment • have a traumatic or non-traumatic SCI at any level • be at least 4 weeks post-discharge from initial inpatient rehabilitation • be English-speaking • provide informed consent to participate Exclusion criteria • History of moderate or severe traumatic brain injury • Participant in another RCT, formal clinical group or psychological therapy • Individuals currently experiencing ≥moderately severe levels of depression • Individuals currently			blind due to nature of intervention 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? No – modular approach and strict schedule to intervention. Treatment fidelity monitoring also performed. 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomized? NA Risk-of-bias judgement Low risk Domain 3: Missing outcome data 3.1 Were data for this outcome available for all, or nearly all, participants

Study details	Participants	Interventions	Outcomes and Results	Comments
	 self-efficacious Living beyond a reasonable commuting distance from the study site Participants unable to verbally communicate 			randomized? No – only 4 (5%) lost to follow up/withdrew but all were assigned to the intervention group 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? PY – sensitivity analysis and adjustment for co-variates done 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? NA 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? NA Risk-of-bias judgement Low risk Domain 4: Risk of bias in measurement of the outcome 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants? No – outcome assessors blinded to intervention group

Study details	Participants	Interventions	Outcomes and Results	Comments
				 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? NA 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? NA Risk-of-bias judgement Low risk Domain 5: Risk of bias in selection of the reported result 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN Risk-of-bias judgement Some concerns Overall risk of bias

Study details	Participants	Interventions	Outcomes and Results	Comments
				Other information None
Full citation Elinge, Eva, Löfgren, Britta, Gagerman, Eva, Nyberg, Lars, A Group Learning Programme for Old People with Hip Fracture: A Randomized Study, Scandinavian Journal of Occupational Therapy, 10, 27-33, 2003 Ref Id 1118075 Country/ies where the study was carried out Sweden Study type RCT Aim of the study To investigate the effectiveness of a group learning programme on ability to participate in perceived performance and social activities after hip fracture. Study dates Recruitment: October 1996 to February 1998	Sample size N= 43 (randomised) • Small group learning: 21 • Standard care and rehab: 22 N= 35 (analysed) • Small group learning: 21 • Standard care and rehab: 14 Characteristics Age in years [Mean (SD)]: • Small group learning = 73.1 (7.3) • Standard care and rehab = 73.8 (11.1) Gender (M/F): • Small group learning (N): 5/16 • Standard care and rehab (N): 3/11 Time since injury in years: not reported Injury cause: not reported Length of hospitalisation in days: not reported	 Interventions First pre-intervention assessment occurred 3 months after hip or vertebral fracture, post-intervention 2nd assessment, and 3rd assessment 12 months after the intervention. <i>Control group</i> Standard care for hip fractures and rehabilitation as provided by trauma centre. No further information reported. <i>Intervention group</i> Group learning programme consisting of lectures from a multi-disciplinary geriatric team, focusing on the risk factors and effects of osteoporosis, fall prevention and performing activities of daily living safely. Lecturers included a dietician, an occupational therapist, a physician, a physiotherapist, a social worker and a gymnast. Participants were divided into 4 groups, each with 5-8 participants, and started 106-194 days after hip fracture (when enough participants had joined the study). Each session lasted 2 hours (1 hour of education, 1 hour of weight-bearing exercise), and ran once a week for 10 weeks. Additionally, intervention participants received an individually tailored home-training programme. 	Results Changes in ADL (Barthel ADL Index) [median (range)] At intervention completion: • Small group learning: 20 (12-20) • Standard care and rehab: 19 (16-20) 12 months after intervention completion: • Small group learning: 20 (18-20) • Standard care and rehab: 19 (17-20)	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? NI 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? NI 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? PY - significantly significant lower ability to perform activities of daily living at baseline in control. <i>Risk-of-bias judgement:</i> High risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware of their assigned intervention during the trial? PY 2.2. Were carers and people delivering the interventions

Study details	Participants	Interventions	Outcomes and Results	Comments
Source of funding This study received funding from the Swedish National Board of Health and Welfare and Geriatric Centre, Um eå University Hospital	 Fracture type (cervical/trochanteric): Small group learning (N): 16/5 Standard care and rehab (N): 10/4 Inclusion criteria Patients had to be: Part of larger group learning programme including patients with hip or vertebral fracture Admitted to Orthopaedic or Geriatric clinic at Umeå University Hospital with diagnosis of hip fracture or vertebral fracture Exclusion criteria Dementia or other severe cognitive impairment Psychiatric or other severe illness Fracture caused by high- energy trauma or pathology Previous fracture of opposite hip Inability to walk independently before 			aware of participants' assigned intervention during the trial? PY 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? NI 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> Low risk Domain 3: Missing outcome <u>data</u> 3.1 Were data for this outcome available for all, or nearly all, participants randomised? No - large

Study details	Participants	Interventions	Outcomes and Results	Comments
	fracture			attrition in control arm only. 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? No 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PY 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? PY - large loss to follow-up in the control group only. Outcome data only available for 14/22 in control group, compared to all 21 participants in intervention group. <i>Risk-of-bias judgement:</i> High risk <u>Domain 4: Risk of bias in</u> <u>measurement of the</u> <u>outcome</u> 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants? NI 4.4 If Y/PY/NI to 4.3: Could

Study details	Participants	Interventions	Outcomes and Results	Comments
				assessment of the outcome have been influenced by knowledge of intervention received? PY 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? PY <i>Risk-of-bias judgement:</i> High risk <u>Domain 5: Risk of bias in</u> selection of the reported <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i> Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High

Study details	Participants	Interventions	Outcomes and Results	Comments
				risk
				Other information None.
 Full citation Holmes, A., Hodgins, G., Adey, S., Menzel, S., Danne, P., Kossmann, T., Judd, F., Trial of interpersonal counselling after major physical trauma, Australian and New Zealand journal of psychiatry, 41, 926-933, 2007 Ref Id 1070729 Country/ies where the study was carried out Australia Study type RCT Aim of the study To measure the effectiveness of an interpersonal counselling intervention on reducing psychological morbidity after major physical 	Sample size N= 90 (randomised) • Interpersonal counselling: 51 • Standard care: 39 N= 58 (analysed) • Interpersonal counselling: 27 • Standard care: 31 Characteristics Age in years [Mean (SD)]: • Interpersonal counselling = 39.9 (15.8) • Standard care = 36.4 (14.8) Gender (M/F): • Interpersonal counselling (N): 36/15 • Standard care (N): 27/12 Time since injury in years: not reported	 Interventions Control group Standard care including non-specific psychological support (physiological and occupational). No further information reported apart from noting that if patients exhibited psychological distress, they were referred to the study co-ordinator or their primary care doctor. Intervention group Interpersonal counselling (IPC) delivered for initial 3 months' post-trauma. Sessions included identifying the impact of trauma on interpersonal issues, both before and after the incident, as well as issues of role transference, grief and loss. Strategies for adaptation were developed during sessions and practiced by participants between therapy. Therapists Professional clinical psychologists who had received at least 20 hours IPC seminar training and subject to ongoing peer reviewing of sessions. 	ResultsChanges in mood (BDI) [mean (SD)]At 3 months:Interpersonal counselling: 13.1 (12.4)Standard care: 9.8 (7.8)At 6 months:Interpersonal counselling: 12.3 (11.2)Standard care: 12.3 (11.5)Changes in mood (HADS Anxiety score) [mean (SD)]At 3 months:Interpersonal counselling: 4.7 (5.0)Standard care: 4.1 (3.9)At 6 months:Interpersonal counselling: 6.9 (5.2)Standard care: 6.9 (5.2)	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomization process 1.1 Was the allocation sequence random? Y – research officer made blind selection from mixed envelopes. 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences between intervention groups suggest a problem with the randomization process? PN <i>Risk-of-bias judgement</i> : Low risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware
trauma.	Injury cause: not reported			of their assigned intervention

Study details	Participants	Interventions	Outcomes and Results	Comments
Study dates Not reported Source of funding This study received funding from the Victorian Trauma Foundation.	Length of hospitalisation in days [Mean (SD)]: • Interpersonal counselling: 15.7 (13.3) • Standard care: 13.1 (11.4) % total burn surface area [Mean (SD)]: • Interpersonal counselling: 35.50 (42.91) • Standard care: 38.00 (43.37) Inclusion criteria Participants had to: • Aged 18 years or older • Experienced major physical trauma without major head injury • Injury not due to self- harm • No current psychotic illness Exclusion criteria Not reported. See above for inclusion criteria.		Changes in mood (HADS Depression score) [mean (SD)] At 3 months: • Interpersonal counselling: 5.6 (5.1) • Standard care: 4.3 (3.9) At 6 months: • Interpersonal counselling: 8.9 (6.8) • Standard care: 8.2 (6.4)	during the trial? NI 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? NI 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PY - no information given on frequency of intervention, length of session 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? PN 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? PY 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> High risk

Study details	Participants	Interventions	Outcomes and Results	Comments
				Domain 3: Missing outcome data 3.1 Were data for this outcome available for all, or nearly all, participants randomised? No – data only available for 27/51 in intervention group and 31/39 in control group. 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? PY 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? NA 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? NA <i>Risk-of-bias judgement:</i> Low risk Domain 4: Risk of bias in measurement of the outcome 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by

Study details	Participants	Interventions	Outcomes and Results	Comments
Study details				study participants? No 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? NA 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? NA <i>Risk-of-bias judgement</i> : Low risk <u>Domain 5: Risk of bias in</u> selection of the reported <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement</i> : Some concerns

Study details	Participants	Interventions	Outcomes and Results	Comments
				<u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information None.
Full citation Kooijmans, H., Post, M. W. M., Stam, H. J., van der Woude, L. H. V., Spijkerman, D. C. M., Snoek, G. J., Bongers- Janssen, H. M. H., van Koppenhagen, C. F., Twisk, J. W., Bussmann, J. B. J., Effectiveness of a Self-Management Intervention to Promote an Active Lifestyle in Persons With Long-Term Spinal Cord Injury: The HABITS Randomized Clinical Trial, Neurorehabilitation and Neural Repair, 31, 991- 1004, 2017 Ref Id 1091584 Country/ies where the study was carried out The Netherlands	Sample size N= 64 (randomised) • HABITS: 33 • Single meeting control: 31 N= 55 (analysed at 16 weeks) • HABITS: 30 • Control: 25 N= 51 (analysed at 42 weeks) • HABITS: 28 • Single meeting control: 23 Characteristics Age in years [Mean (SD)]: • HABITS = 48 (10) • Single meeting control = 49 (11) Gender (M/F): • HABITS (N): 21/12	 Interventions Assessments occurred at baseline, 16 weeks following baseline and 42 weeks following baseline. Participant assessed outcomes were collected via self- report and an activity monitor while physical tests were carried out at the rehabilitation centre. <i>Control group</i> One group meeting in week 1, giving information on active lifestyle in SCI, and 'How to Stay Fit with SCI' information booklet. This booklet had been published at the start of the study and contained up-to-date information. <i>Intervention group</i> Healthy Active Behavioural Intervention in SCI (HABITS), which involved 1 home visit and 5 group sessions over 16 weeks. Designed to include elements that can facilitate an active lifestyle and increase self- management mechanisms: counsellor guidance; peer support; information and discussions relating to active 	Results Quality of life (WHOQOL- 5) [mean (SD)] At 16 weeks (following baseline): • HABITS (N=21): 18.5 (3.1) • Single meeting control (N=21): 19.0 (2.7) At 42 weeks (following baseline): • HABITS (N=17): 19.8 (3.3) • Single meeting control (N=14): 18.7 (2.8) Overall quality of life (MHI- 5) [mean(SD)] At 16 weeks (following baseline): • HABITS (N=21): 77.5 (11.2)	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? NI 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences between intervention groups suggest a problem with the randomization process? N <i>Risk-of-bias judgement:</i> Low risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware
Study type	 Single meeting control 	lifestyle; action planning and coping strategies; problem	Single meeting control	of their assigned intervention during the trial? PY

Study details	Participants	Interventions	Outcomes and Results	Comments
RCT Aim of the study To test the effectiveness of a structured self- management intervention on physical activity, perceived behaviour control, stages of exercise change, and attitude in people with chronic SCI. Study dates Recruitment: January 2012 to October 2014 Source of funding This study received funding from by ZonMW and Fonds Nutsohra.	 (N): 24/7 Time since injury in years [Mean (SD)]: HABITS = 21 (8) Single meeting control = 23 (10) Injury cause: not reported Inclusion criteria Participants had to: Be aged 28-65 years' old Be aged 18 years or above at the time of injury, and have at least 10 years since injury Able to use a hand-rim wheelchair Physically inactive (defined as Physical Activity Scale for Individuals with Physical Disabilities score below 75th percentile of Dutch population) Exclusion criteria No intent to change physical activity behaviour in next 6 months Progressive disease or severe co-morbidities Psychiatric issues that 	 solving; and activity monitoring. Participants also received a work book and a 'How to Stay Fit with SCI' information booklet. <i>HABITS</i> Combines the Theory of Planned Behaviour and Transtheoretical Model of Behaviour Change in its framework. Targets 2 areas for behaviour change - optimising intentions toward a healthier lifestyle and improving perceived behaviour control (which itself includes self- efficacy and proactive coping). <i>Counsellors</i> Professionals currently working in rehabilitation centres, used to working with people with SCI e.g. occupational therapists, who received training in motivational interviewing. 	 (N=21): 74.7 (11.2) At 42 weeks (following baseline): HABITS (N=17): 79.3 (14.1) Single meeting control (N=14): 78.6 (9.4) Changes in activity of daily living (SCIM3) [mean (SD)] At 16 weeks (following baseline): HABITS (N=25): 58.5 (15.6) Single meeting control (N=25): 56.6 (15.6) At 42 weeks (following baseline): HABITS (N=23): 57.9 (16.3) Single meeting control (N=20): 57.1 (15.5) 	 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? N - researchers blinded until data analysis stage 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? N 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> Low risk Domain 3: Missing outcome data

Study details	Participants	Interventions	Outcomes and Results	Comments
	might affect study adherence and results • Insufficient knowledge of Dutch language that would preclude participant giving informed consent			 3.1 Were data for this outcome available for all, or nearly all, participants randomized? N 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? N - imputation of values 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PY 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? PY – intervention group has missing data for 15% (28/33) but 25% (23/31) for control group. <i>Risk-of-bias judgement:</i> High risk Domain 4: Risk of bias in measurement of the outcome 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? No 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants? No

4.4 If Y/PY/NI to	
assessment of t have been influe knowledge of im received? NA 4.5 If Y/PY/NI to likely that assess outcome was im knowledge of im received? NA <i>Risk-of-bias judy</i> risk <u>Domain 5: Risk</u> <u>selection of the</u> <u>result</u> 5.1 Were the da produced this re analysed in accu a pre-specified a that was finalise unblinded outco were available fr Y Is the numerical assessed likely selected, on the results, from 5.2 multiple of measurements of definitions, time within the outco PN 5.3 multiple a the data? PN <i>Risk-of-bias judy</i> risk	the outcome enced by tervention 0 4.4: Is it asment of the fluenced by tervention <i>gement:</i> Low <u>of bias in</u> <u>reported</u> ata that esult ordance with analysis plan ed before ome data for analysis? I result being to have been e basis of the outcome (e.g. scales, points) ome domain? analyses of

Study details	Participants	Interventions	Outcomes and Results	Comments
				<i>Risk-of-bias judgement:</i> High risk Other information None.
 Full citation Mercier, H. W., Ni, P., Houlihan, B. V., Jette, A. M., Differential Impact and Use of a Telehealth Intervention by Persons with MS or SCI, Am J Phys Med Rehabil, 94, 987-99, 2015 Ref Id 1118078 Country/ies where the study was carried out USA Study type RCT Aim of the study To measure the effect of CareCall, a telehealth intervention, in adult wheelchair users with severe mobility limitations and spinal cord injury. 	Sample size N= 142 (randomised) • CareCall (MS): 18 • CareCall (SCI): 53 • Standard care and resource book: 71 (18 MS + 53 SCI) N= 106 (analysed) • CareCall (SCI): 53 • Standard care and resource book: 53 Characteristics Age in years [Mean (SD)]: • CareCall = 45.8 (12.1) • Standard care and resource book = 45.0 (14.0) Gender (M/F): • CareCall (N): 42/11 • Standard care and resource book (N): 34/19 Time since injury in years [Mean (SD)]:	 Interventions Assessment was done in participant homes, by blinded assessors, at baseline and 6months follow-up. Control group Standard care plus CareCall resource book. No further information reported. Intervention group CareCall. 6 months of scheduled automated telephone calls to deliver educational content, peer support and clinical expertise relating to depression, skin care, wellness and health care utilisation. Calls were delivered weekly for initial 3 months and every 2 weeks for the last 3 months. These calls were pre-programmed to be automatically made to participants at on their preferred schedule. If needed, participants could call into the CareCall system to access that week's content, report a healthcare issue or leave a message for a nurse tele-rehabilitation co-ordinator. Participants also received a resource book that reinforced diagnosis-specific and general information provided 	Results Changes in activity of daily living (CHART-SF Physical independence) [mean (SD)] at 6 months: • CareCall: 72.4 (34.5) • Standard care and resource book: 70.4 (32.2) Changes in mood (PHQ-9 depression score) [mean (SD)] at 6 months: • CareCall: 3.0 (3.5) • Standard care and resource book: 4.0 (5.0) NB. Satisfaction is measured and reported but only in intervention group so no comparison data.	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomization process 1.1 Was the allocation sequence random? NI 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? NI 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? PN <u>Risk-of-bias judgement:</u> Some concerns Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware of their assigned intervention during the trial? NI 2.2. Were carers and people

Study details	Participants	Interventions	Outcomes and Results	Comments
NOTE: Study includes participants with MS and SCI. However, results are reported separately for these conditions and only SCI has been extracted. Study dates Not reported Source of funding This study received funding from the Centers for Disease Control and Prevention, the Department of Health and Human Services, and the National Institute of Disability and Rehabilitation Research.	 CareCall: 11.5 (11.7) Standard care and resource book: 12.1 (9.7) Injury cause: not reported Length of hospitalisation in days: not reported SCI level (cervical/thoracic/lum bar): CareCall (N): 23/25/2 Standard care and resource book (N): 28/21/4 Inclusion criteria Participants had to: Community-residing adults with spinal cord dysfunction (either multiple sclerosis or spinal cord injury) Use a wheelchair at least 6 hours per day Sufficient cognitive ability to use CareCall intervention Exclusion criteria Participants at risk for self-harm. Stage III pressure ulcer. 	during Carecall telephone calls, as well as additional information on community resources. • <i>Nurse telerehabilitation co- ordinators</i> Alerted when a clinically significant event was reported to CareCall, and called participants back 48-72 hours later (depending on severity of alert). Nurses were then able to provide appropriate referral, resources and action. A tracking system was utilised to inform future CareCall information.		delivering the interventions aware of participants' assigned intervention during the trial? PY 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? NI 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> Some concerns <u>Domain 3: Missing outcome</u> <u>data</u> 3.1 Were data for this outcome available for all, or nearly all, participants

Study details F	Participants	Interventions	Outcomes and Results	Comments
				likely that assessment of the outcome was influenced by knowledge of intervention received? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 5: Risk of bias in</u> <u>selection of the reported</u> <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i> Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> Some concerns
				Other information

Study details	Participants	Interventions	Outcomes and Results	Comments
 Full citation Migliorini, C., Sinclair, A., Brown, D., Tonge, B., New, P., A randomised control trial of an Internet-based cognitive behaviour treatment for mood disorder in adults with chronic spinal cord injury, Spinal Cord, 54, 695-701, 2016 Ref Id 1022802 Country/ies where the study was carried out Australia Study type RCT Aim of the study This RCT aimed to compare a skills and psycho-education programme intervention to waitlist controls in adults after spinal cord injury (SCI). Study dates Recruitment: 15 month period from 2012 to 2013 Source of funding Supported by 	 Sample size N= 59 (randomised) Psycho-educational programme: 34 Waitlist control: 25 N= 48 (analysed) Psycho-educational programme: 23 Waitlist control: 25 Characteristics Age in years [Mean (SD)]: Psycho-educational programme = 47.5 (12.2) Waitlist control Control Control = 52.8 (12.9) Gender (M/F): Psycho-educational programme (N): 25/9 Waitlist control Control (N): 17/8 Time since injury in months (Mean [SD]): Psycho-educational programme: 11.4 (11.9) Waitlist control Control control: 19.8 (14.0) Level of injury: Not reported Type of SCI: Not reported 	 Intervention: ePACT, a weekly modular skills and psycho-educational programme based on cognitive behavioural therapy for 10 sessions (between 10 mins and 1 hour). Work was assigned outside of class to continue development and it was recommended to have clinician support by telephone and/or e-mail. Control: Waitlist control 	Results Changes in mood (DASS- 21: Depression) [mean (SD)] At intervention completion (10-12 weeks from baseline): • Psycho-educational programme: 12.3 (12.2) • Control (waitlist): 15.0 (10.8) Changes in mood (DASS- 21: Anxiety) [mean (SD)] At intervention completion (10-12 weeks from baseline): • Psycho-educational programme: 7.0 (7.9) • Control (waitlist): 7.2 (8.2)	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomization process 1.1 Was the allocation sequence random? Y - block allocation (groups of 10) 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? PN – 1:1 block randomisation (groups of 10) changed to 3:2 (groups of 10) as study progressed due to large drop out in one arm 1.3 Did baseline differences between intervention groups suggest a problem with the randomization process? PY – comparative analysis performed. Some discrepancies in time since and level of injury. Risk-of-bias judgement High risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware

Study details	Participants	Interventions	Outcomes and Results	Comments
beyondblue, Victorian Centre of Excellence 2011 Research Grant.	Inclusion criteria Participants had to: • be aged between 18 and 70 years old • have chronic (more than 6 months) SCI • scored above normative threshold on Depression, Anxiety and Stress Scale-Short Form • be living in the community Exclusion criteria Not reported.			of their assigned intervention during the trial? Y – allocation concealed from participants until baseline interview completed 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY – not possible to blind due to nature of intervention 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PN – modular approach and strict schedule to intervention. 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were

Study details	Participants	Interventions	Outcomes and Results	Comments
				randomized? NA Risk-of-bias judgement Low risk Domain 3: Missing outcome data 3.1 Were data for this outcome available for all, or nearly all, participants randomized? No - roughly 18.5% dropout. 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? No 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PY – documented several reasons but not for all 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? PY – all drop-out occurred in intervention group, some reasons due to intervention itself <i>Risk-of-bias judgement</i> High risk Domain 4: Risk of bias in measurement of the outcome 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN

Study details	Participants	Interventions	Outcomes and Results	Comments
				 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants? PY - majority self-reported (unblended study), not mention of professional study assessors 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? y - self reported measures used 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? PN <i>Risk-of-bias judgement</i> Some concerns Domain 5: Risk of bias in selection of the reported result 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales,

Study details	Participants	Interventions	Outcomes and Results	Comments
				definitions, time points) within the outcome domain? NI 5.3 multiple analyses of the data? NI Risk-of-bias judgement Some concerns Overall risk of bias <i>Risk-of-bias</i> <i>judgement</i> High risk Other information None.
Full citation	Sample size	Interventions	Results	Limitations
Mohaddes Ardebili, Fatemeh, Najafi Ghezeljeh, Tahereh, Bozorgnejad, Mehri, Zarei, Mohammadreza, Ghorbani, Hooman, Manafi, Farzad, Effect of Multimedia Self-Care Education on Quality of Life in Burn Patients, World journal of plastic surgery, 6, 292-297, 2017 Ref Id 1091623 Country/ies where the study was carried out Iran Study type RCT	 N= 100 (randomised) Multi-media self-care education: 50 Self-care recommendation: 50 N= 100 (analysed) Multi-media self-care education: 50 Self-care recommendation: 50 Characteristics Age in years (18-28/29- 38/39-48/49-58): Multi-media self-care education (N) = 11/15/17/7 Self-care recommendation (N) = 10/22/14/6 	 Assessment occurred at discharge (basline) and at 3 months follow-up, via telephone. <i>Control group</i> Face-to-face delivered suggested self-care routine. No further information reported. <i>Intervention group</i> Face-to-face suggested self-care routine plus a burn patient self-care CD, educational books and information resources. Information on self-care included activities of daily living, care of repaired burn areas and skin grafts, nutrition, compression clothing, mental health education, sleep improvement, and pharmacological care. Participants also received a briefing session prior to discharge to ask any questions the educational material may have raised. 	Quality of life (Brief BSHQ) [mean (SD)] 3 months after intervention: • Multi-media self-care education: 3.37 (0.93) • Self-care recommendation: 2.24 (0.37)	Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) <u>Domain 1: Risk of bias</u> <u>arising from the</u> <u>randomisation process</u> 1.1 Was the allocation sequence random? NI 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? NI 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? PY - significant differences found in baseline occupation and marital status. <i>Risk-of-bias judgement:</i> High risk <u>Domain 2: Risk of bias due</u>

Study details	Participants	Interventions	Outcomes and Results	Comments
Aim of the study To investigate the effect of a multi-media self- education package on quality of life in burn patients. Study dates Investigation: November 2015 to December 2016 Source of funding Not reported.	Gender (M/F): • Multi-media self-care education (N): 23/28 *Adds up to 51, double checked reported figures. • Self-care recommendation (N): 22/28 Time since injury in years: not reported Injury cause (Gas/Natural gas/Flame/Liquids/Kerosin e/Food/Other) • Multi-media self-care education (N): 3/8/18/13/1/4/3 • Self-care recommendation (N): 2/14/17/12/2/1/2 Inclusion criteria • Not reported. Exclusion criteria • Not reported.			to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware of their assigned intervention during the trial? NI 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? NI 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? NI 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were

Study details	Participants	Interventions	Outcomes and Results	Comments
				randomised? NA
				Risk-of-bias judgement: Some concerns
				<u>Domain 3: Missing outcome</u> <u>data</u>
				3.1 Were data for this outcome available for all, or nearly all, participants randomised? Y
				3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? NA
				3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? NA
				3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? NA
				<i>Risk-of-bias judgement:</i> Low risk
				Domain 4: Risk of bias in measurement of the outcome
				4.1 Was the method of measuring the outcome inappropriate? PN
				4.2 Could measurement or ascertainment of the outcome have differed
				between intervention groups? PY - no blinding and self-report outcomes
				4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the

Study details	Participants	Interventions	Outcomes and Results	Comments
				intervention received by study participants? NA 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? NA 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? NA <i>Risk-of-bias judgement:</i> High risk <u>Domain 5: Risk of bias in</u> <u>selection of the reported</u> <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i>

Study details	Participants	Interventions	Outcomes and Results	Comments
_				Some concerns
				Overall risk of bias
				<i>Risk-of-bias judgement:</i> High risk
				Other information
				None.
Full citation	Sample size	Interventions	Results	Limitations
Nooijen, C. F., Stam, H.	N= 45 (randomised)	 Assessment occurred 2 months 		Quality assessment: Risk
J., Bergen, M. P., Bongers-Janssen, H. M.,	Motivational interviewing:	before inpatient rehabilitation	Changes in ADL (min/day	of bias assessed using revised Cochrane risk of bias
Valent, L., van	23	discharge (baseline), inpatient rehabilitation discharge, 6 months	wheeled physical activity) [mean (SD)]	tool (RoB 2)
Langeveld, S., Twisk, J.,	Standard care: 22	post-dsischare (within 4 weeks of		Domain 1: Risk of bias
van den Berg-Emons, R.	N= 30 (analysed at	intervention completion), and 12	At discharge (2 months	arising from the
J., A behavioural intervention increases	discharge [2 months after	months post-discharge. Measurements were a mixture of	after baseline):	randomisation process
physical activity in people	baseline])	physical activity monitions,	Motivational interviewing:	1.1 Was the allocation sequence random? Y –
with subacute spinal cord	Motivational	physical tests and self-reported	72 (14)	block randomisation by
injury: a randomised trial, Journal of physiotherapy,	interviewing: 16	outcomes.	• Standard care: 61 (21)	computer-genrated random
62, 35-41, 2016	• Standard care: 14	 Control group Standard care, including a handcycle training 	At 6 months after	number list.
	N= 27 (analysed at 6	programme and advice on	discharge:	1.2 Was the allocation sequence concealed until
Ref Id	months after discharge)	physical activity post-discharge.	 Motivational interviewing: 	participants were enrolled
1091349	Motivational interviewing:	The handcycling programme consisted of a structured interval	68 (30)	and assigned to
.	13	training protocol, 3 times per	 Standard care: 40 (31) 	interventions? Y
Country/ies where the study was carried out	Standard care: 14	week for last 8 weeks of inpatient		1.3 Did baseline differences between intervention groups
The Netherlands		rehabilitation. Physical activity	At 12 months after discharge:	suggest a problem with the
ine nomonando	N= 20 (analysed at 12 months after discharge)	advice was mainly sports-related rather than activities of daily living	 Motivational interviewing: 	randomisation process? PN
Study type	 Motivational interviewing: 	and was unstructured. All	73 (40)	<i>Risk-of-bias judgement:</i> Low risk
RCT	10	participants continued	• Standard care: 50 (39)	risk Domain 2: Risk of bias due
	Standard care: 10	rehabilitation after discharge.		to deviations from the
Aim of the study		 Intervention group Behavioural intervention aimed at increasing 	Changes in activity of daily	intended interventions (effect
To test the effect of	Characteristics	the amount of physical activity	living (PASIPD, (MET	of assignment to

Study details	Participants	Interventions	Outcomes and Results	Comments
standard rehabilitation including a behavioural intervention promoting physical activity on physical activity in people with subacute spinal cord injury. Study dates Recruitment: January 2011 to August 2013. Source of funding This study received funding from Children's Fund Adriaanstichting and Johanna Children's Fund.	Age in years [Mean (SD)]: • Motivational interviewing = 44 (15) • Standard care = 44 (15) Gender (M/F): • Motivational interviewing (N): 17/3 • Standard care (N): 16/3 Time since injury in days [Mean (SD)]: • Motivational interviewing = 139 (67) • Standard care = 161 (81) Traumatic injury cause [N (%)] • Motivational interviewing: 14 (70) • Standard care: 12 (63) Motor complete injury [N (%)] • Motivational interviewing: 13 (65) • Standard care: 11 (58) Inclusion criteria Participants had to: • be aged 18-65 years old • have been diagnosed with SCI • have undergone initial	 performed every day during outpatient rehabilitation, plus standard care. The intervention was given during 13 individual sessions (maximum 60 minutes each), either given face-to-face or via telephone, if more practical. As of 2 months prior to discharge, sessions were scheduled twice per month until 3 months after discharge. After these 10 sessions, the remaining sessions were scheduled one every three months. <i>Coaches</i> Professional occupational therapists or physiotherapists trained in motivational interviewing (based on transtheoretical model). <i>Motivational interviewing</i> Each session began with participants proposing topics of conversation. The intervention itself had 4 main components: 1. feedback on daily wheelchair activity using bicycle odometers. Each participant was supposed to keep track of the distance travelled each day, and set goals to increase this range; 2. planning of how and when to be physically active and coping strategies for potential barriers; 3. home visit from the coach in the first month post-discharge in which coach aimed to optimise the home and environment for 	 hour/day)) [mean(SD)] At 6 months after discharge Motivational interviewing: 32 (34) Standard care: 10 (8) At 12 months after discharge: Motivational interviewing: 26 (11) Standard care: 11 (12) 	intervention) 2.1. Were participants aware of their assigned intervention during the trial? PY 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PN 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> Low risk

Study details	Participants	Interventions	Outcomes and Results	Comments
	 inpatient rehabilitation be dependent on a manual wheelchair and able to handcycle Exclusion criteria Insufficient comprehension of the Dutch language which affects an individual's ability to understand study participation A progressive disease or psychiatric condition that could impact participation in trial 	physical activity; and 4. provision of relevant information if requested.		Domain 3: Missing outcome data3.1 Were data for this outcome available for all, or nearly all, participants randomized? N - large attrition (lost more than 50% over 12 months)3.2 If No/PN/NI to 3.1: Is

Study details	Participants	Interventions	Outcomes and Results	Comments
				intervention received by study participants? N 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? NA 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 5: Risk of bias in</u> <u>selection of the reported</u> <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i>

Study details	Participants	Interventions	Outcomes and Results	Comments
				Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information
Full citation Nooijen, C. F., Stam, H. J., Schoenmakers, I., Sluis, T. A., Post, M. W., Twisk, J. W., van den Berg-Emons, R. J., Working mechanisms of a behavioural intervention promoting physical activity in persons with subacute spinal cord injury, Journal of Rehabilitation Medicine, 48, 583-588, 2016 Ref Id 1091350	Same study as Nooijen, C. F., Stam, H. J., Bergen, M. P., Bongers-Janssen, H. M., Valent, L., van Langeveld, S., Twisk, J., van den Berg-Emons, R. J., A behavioural intervention increases physical activity in people with subacute spinal cord injury: a randomised trial, Journal of physiotherapy, 62, 35-41, 2016. See that entry for full details.	Same study as Nooijen, C. F., Stam, H. J., Bergen, M. P., Bongers-Janssen, H. M., Valent, L., van Langeveld, S., Twisk, J., van den Berg-Emons, R. J., A behavioural intervention increases physical activity in people with subacute spinal cord injury: a randomised trial, Journal of physiotherapy, 62, 35-41, 2016. See that entry for full details.	ResultsChanges in mood (CES-D depression score) [mean (SD)]At discharge (2 months after baseline):• Motivational interviewing: 14.94 (10.28)• Standard care: 12.00 (7.30)6 months after discharge: • Motivational interviewing: 15.93 (14.36)• Standard care: 16.62 (9.73)12 months after discharge: • Motivational interviewing: 11.91 (12.16)• Standard care: 13.30 (8.60)Pain (Chronic Pain Grade	None. Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? Y – block randomisation by computer-genrated random number list. 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? PN <i>Risk-of-bias judgement:</i> Low risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to

Study details	Participants	Interventions	Outcomes and Results	Comments
			pain intensity) [mean (SD)]	intervention)
			At discharge (2 months after baseline):	2.1. Were participants aware of their assigned intervention during the trial? PY
			Motivational interviewing:	2.2. Were carers and people delivering the interventions
			50.74 (25.32) • Standard care: 47.78	aware of participants'
			(30.69)	assigned intervention during the trial? PY
			6 months after discharge:	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from
			 Motivational interviewing: 50.72 (24.98) 	the intended intervention that arose because of the
			 Standard care: 49.49 (29.72) 	experimental context? PN 2.4. If Y/PY to 2.3: Were
			, , , , , , , , , , , , , , , , , , ,	these deviations from
			12 months after discharge:Motivational interviewing:	intended intervention balanced between groups?
			45.76 (32.25)	NA 2.5 If No/PN/NI to 2.4: Were
			• Standard care: 49.67 (26.36)	these deviations likely to have affected the outcome? NA
			Pain (Chronic Pain Grade disability score) [mean (SD)]	2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT
			6 months after discharge:	analysis
			 Motivational interviewing: 0.86 (1.46) 	2.7 If No/PN/NI to 2.6: Was there potential for a
			• Standard care: 0.92 (1.66)	substantial impact (on the result) of the failure to analyse participants in the group to which they ware
			12 months after discharge:	group to which they were randomised? NA
			 Motivational interviewing: 1.55 (1.57) 	<i>Risk-of-bias judgement:</i> Low risk

Study details	Participants	Interventions	Outcomes and Results	Comments
			• Standard care: 0.40 (0.70)	Domain 3: Missing outcome data 3.1 Were data for this outcome available for all, or nearly all, participants randomized? N - large attrition (lost more than 50% over 12 months) 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? N 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PY 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? PN - similar proportions and reasons between groups <i>Risk-of-bias judgement:</i> High risk Domain 4: Risk of bias in measurement of the outcome 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? N 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the

Study details	Participants	Interventions	Outcomes and Results	Comments
				intervention received by study participants? N 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? NA 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 5: Risk of bias in</u> <u>selection of the reported</u> <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i>

Study details	Participants	Interventions	Outcomes and Results	Comments
				Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information None.
Full citation Nooijen, C. F., Stam, H. J., Sluis, T., Valent, L., Twisk, J., van den Berg- Emons, R. J., A behavioral intervention promoting physical activity in people with subacute spinal cord injury: secondary effects on health, social participation and quality of life, Clinical Rehabilitation, 31, 772- 780, 2017 Ref Id 1091648	Same study as Nooijen, C. F., Stam, H. J., Bergen, M. P., Bongers-Janssen, H. M., Valent, L., van Langeveld, S., Twisk, J., van den Berg-Emons, R. J., A behavioural intervention increases physical activity in people with subacute spinal cord injury: a randomised trial, Journal of physiotherapy, 62, 35-41, 2016. See that entry for full details.	Same study as Nooijen, C. F., Stam, H. J., Bergen, M. P., Bongers-Janssen, H. M., Valent, L., van Langeveld, S., Twisk, J., van den Berg-Emons, R. J., A behavioural intervention increases physical activity in people with subacute spinal cord injury: a randomised trial, Journal of physiotherapy, 62, 35-41, 2016. See that entry for full details.	ResultsQuality of life (SF-36 General health) [mean (SD)]At discharge (2 months after baseline):• Motivational interviewing: 54.12 (21.38)• Standard care: 54.58 (20.05)At month 6 after discharge: • Motivational interviewing: 55.00 (23.86)• Standard care: 53.85 (15.70)At month 12 after discharge: • Motivational interviewing: 53.50 (25.83)• Standard care: 54.50 (21.66)	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? Y – block randomisation by computer-genrated random number list. 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? PN <i>Risk-of-bias judgement:</i> Low risk Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to

(SD)]of their assigned intervention during the trial? PYAt discharge (2 months after baseline):At discharge (2 months after baseline):2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY.5.33 (18.86).5.33 (18.86).3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intervention form the interded intervention.4. If Y/PY to 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the interded intervention aware of participants' assigned intervention the intervention during the trial? PY.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from trianed intervention aware of participants' assigned intervention the intervention from the intervention from the intervention the intervention from the intervention balanced between groups? NA.4. If Y/PY to 2.3: Were these deviations likely to have affect de outcome? NA.5. If No/PN/NI to 2.4: Were these deviations likely to have affect de outcome? NA.5. If No/PN/NI to 2.4: Were these deviations likely to have affect de outcome? NA.5. If No/PN/NI to 2.4: Were these deviations likely to have affect of assignment to intervention for a substantel intervention for a substantel intervention for a substantel interviewing: for analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantel interviewing: for analyse participants in the imerviewing: 65.04 (13.37)	Study details	Participants	Interventions	Outcomes and Results	Comments
after baseline):elivering the interventions aware of participants' assigned intervention assigned intervention the trial? PY 2.3. If YIPY/NI to 2.1 or 2.2: Were there deviations from the intended intervention the intended intervention balanced between groups? NAAt month 6 after discharge: • Motivational interviewing: 73.14 (23.03)At month 6 after discharge: • Motivational interviewing: 73.14 (23.03)2.3. If YIPY/NI to 2.1 or 2.2: Were there deviations from the intended intervention balanced between groups? NAAt month 12 after discharge: • Motivational interviewing: 73.45 (23.14)2.5 If NO/PN/NI to 2.4: Were these deviations from intended intervention balanced between groups? NAQuality of ife (IMPACT-S participation score) [mean (SD)]At discharge (2 months after baseline): • Motivational interviewing: 65.04 (13.37)2.6 Was an appropriate analysis uset to estimate th effect of assignment to intervention? Y - ITT analysis uset to estimate th effect of assignment to intervention? Y - ITT analysis uset to estimate th effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result of the failure to analyse participants in the group to which they were randomised? NA				36 Mental health) [mean	2.1. Were participants aware of their assigned intervention during the trial? PY
(13.56) risk				after baseline):• Motivational interviewing: 75.33 (18.88)• Standard care: 69.33 (19.32)At month 6 after discharge:• Motivational interviewing: 73.14 (23.03)• Standard care: 62.77 (21.06)At month 12 after discharge:• Motivational interviewing: 73.45 (23.14)• Standard care: 68.80 	 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PN 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> Low

Study details	Participants	Interventions	Outcomes and Results	Comments
			At month 6 after discharge: • Motivational interviewing: 66.67 (11.37) • Standard care: 67.63 (15.60) At month 12 after discharge: • Motivational interviewing: 71.02 (15.14) • Standard care: 66.25 (13.04)	Domain 3: Missing outcome data3.1 Were data for this outcome available for all, or nearly all, participants randomized? N - large attrition (lost more than 50% over 12 months)3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? N3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PY3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? PN - similar proportions and reasons between groups <i>Risk-of-bias judgement:</i> High riskDomain 4: Risk of bias in measurement of the outcome4.1 Was the method of measuring the outcome inappropriate? PN4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? N4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the

Study details	Participants	Interventions	Outcomes and Results	Comments
				intervention received by study participants? N 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? NA 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 5: Risk of bias in</u> <u>selection of the reported</u> <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i>

Study details	Participants	Interventions	Outcomes and Results	Comments
				Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information None.
 Full citation Pirente, N., Blum, C., Wortberg, S., Bostanci, S., Berger, E., Lefering, R., Bouillon, B., Rehm, K. E., Neugebauer, E. A., Quality of life after multiple trauma: the effect of early onset psychotherapy on quality of life in trauma patients, Langenbeck's archives of surgery / Deutsche Gesellschaft fur Chirurgie, 392, 739-745, 2007 Ref Id 1092985 Country/ies where the study was carried out Germany Study type RCT 	Sample size N= 171 (randomised) Intervention: 83 Standard care: 88 N= 92 (analysed) CBT-based psychotherapy: 45 Standard care: 47 Characteristics Age in years [Mean (range)]: CBT-based psychotherapy = 39 (18- 69) Standard care = 38 (21- 65) Gender (M/F): CBT-based psychotherapy (N): 28/17 Standard care (N): 37/10 Total time in hospital in	 Interventions Assesments were carried out at discharge from hospital (baseline), 6 months post trauma and 12 months post trauma. Control group Standard care described as psychological and medical diagnostics. No further information reported. Intervention group Standard care plus a standardised psychotherapy programme. Participants received a maximum of 8 sessions over the course of the intervention, at a maximum of 3 times per week. Delivered by professional research psychologists, trained in CBT and subject to regular supervision from external psychotrauma supervisors. Sessions were documented, including topics of conversation and therapy progress. All patients were able to contact research psychologists for further information throughout the study. 	ResultsQuality of life (HR-QoL) [mean (SD)]At 6 months post trauma:• CBT-based psychotherapy: 0.46 (0.18)• Standard care: 0.52 (0.23)Changes in mood (BDI) [mean(SD)]At 6 months post trauma: • CBT-based psychotherapy: 9.0 (7.9) • Standard care: 8.3 (10.4)At 12 months post trauma: • CBT-based psychotherapy: 9.3 (9.0) • Standard care: 7.5 (7.7)Changes in mood (STAI	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? Y – computer-generated random allocation sequence 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? PY - differences in baseline quality of life, depression and anxiety <i>Risk-of-bias</i> <i>judgement:</i> Some concerns Domain 2: Risk of bias due to deviations from the

Study details	Participants	Interventions	Outcomes and Results	Comments
Aim of the study To test the effect of an early onset CBT intervention on health- related quality of life in severely injured patients. Study dates Recruitment: July 1996 to July 2001. Source of funding This study received funding from the Federal Ministry of Education and Research, the German Research Foundation and the Köln-Fortune Programme, Medical Faculty, University of Cologne.	days [Mean (range)]: • CBT-based psychotherapy = 57 (13- 192) • Standard care = 53 (16- 187) Injury cause (motor vehicle accident/bicycle/collapse/p edestrian/sporting accident/truck accident) • CBT-based psychotherapy (N): 16/15/11/17/3/2 • Standard care (N): 19/20/3/2/1/1/1 Inclusion criteria Participants had to: • Be aged 18 to 70 years old • Have at least 2 injuries with a combined abbreviated injury scale (AIS) severity index \ge 6 • Mentally orientated at the time of initial contact Exclusion criteria • Severe traumatic brain injury (defined as AIS \ge 3 for head trauma and initial Glasgow Coma Scale \le 8) • Attempted suicide		 score) [mean(SD)] At 6 months post trauma: CBT-based psychotherapy: 40.56 (11.6) Standard care: 37.6 (11.0) At 12 months post trauma: CBT-based psychotherapy: 40.20 (12.0) Standard care: 36.51 (10.6) Changes in mood (SCL-4 Symptom Checklist Subscale 5 anxiety score) [mean(SD)] At 6 months post trauma: CBT-based psychotherapy: 54.2 (32.4) Standard care: 41.1 (31.1) At 12 months post trauma: CBT-based psychotherapy: 55.9 (33.0) Standard care: 42.1 (32.8) 	intended interventions (effect of assignment to intervention) 2.1. Were participants aware of their assigned intervention during the trial? Y 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PN 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA

Study details	Participants	Interventions	Outcomes and Results	Comments
	 Attended psychotherapy prior to trauma Injuries due to criminal behaviour Problems with the German language Informed consent not obtained 			Risk-of-bias judgement: Low riskDomain 3: Missing outcome data3.1 Were data for this outcome available for all, or nearly all, participants randomised? No – outcome data only available for 45/83 in intervention group and 47/88 in control group.3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? NI3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PY3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? PN - similar proportions and reasons <i>Risk-of-bias judgement:</i> Some concernsDomain 4: Risk of bias in measurement of the outcome4.1 Was the method of measuring the outcome inappropriate? PN4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN4.3 If No/PN/NI to 4.1 and

Study details	Participants	Interventions	Outcomes and Results	Comments
				 4.2: Were outcome assessors aware of the intervention received by study participants? Y - self report and participants unblinded 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? Y 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? PY <i>Risk-of-bias judgement:</i> High risk Domain 5: Risk of bias in selection of the reported result 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?

Study details	Participants	Interventions	Outcomes and Results	Comments
				PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i> Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information None.
Full citation Schulz, Richard, Czaja, Sara J., Lustig, Amy, Zdaniuk, Bozena, Martire, Lynn M., Perdomo, Dolores, Improving the quality of life of caregivers of persons with spinal cord injury: a randomized controlled trial, Rehabilitation Psychology, 54, 1-15, 2009 Ref Id 1093266 Country/ies where the study was carried out USA Study type RCT	 Sample size N= 173 caregivers/173 care recipients (randomised) Dual target: 57 caregivers/57 care recipients Caregiver only: 56 caregivers/56 care recipients Written information control: 60 caregivers/60 care recipients N= 148 caregivers/151 care recipients (analysed) Dual target: 49 caregivers/50 care recipients Caregiver only: 44 caregivers/45 care recipients Written information 	 Interventions Baseline assessments were carried out in-home by certified assessors, as well as 6 months and 12 months follow-up. <i>Control group</i> Received a standard written pack containing information on SCI, ageing and caregiving, as well as information community resources and programmes. Also had 3 telephone contacts at months 3, 5 and 9 after randomisation. <i>Intervention group</i> Education for caregivers on SCI and increased access to support resources, as well as cognitive and behavioural skills to reduce stress, improve health (mental and physical). Delivered over 6 months via 7 individual training sessions, 5 at home and 2 by telephone. 	Results Changes in mood (CES-D depression score) [mean (SD)] At 12 months follow-up: • Dual target (N=50): 9.35 (6.07) • Caregiver only (N=45): 9.55 (6.63) • Written information control (N=56): 10.28 (6.19) Health symptoms [mean (SD)] At 12 months follow-up: • Dual target (N=50): 3.84 (1.97) • Caregiver only	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? Y – computer generated randomisation sequence 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? PY 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? N <i>Risk-of-bias judgement:</i> Low risk Domain 2: Risk of bias due

Study details	Participants	Interventions	Outcomes and Results	Comments
Aim of the study To investigate the effectiveness of individualised multi- component psychosocial intervention targeted at both carers and their older care recipients with SCI. This was compared with the same individualised psychosocial intervention targeted solely at carers, or with an information only control. Study dates Not reported Source of funding This study received funding from the National Institute of Nursing Research, National Institute on Aging, National Institute of Mental Health, National Institute on Minority Health and Health Disparities, National Heart, Lungs, and Blood Institute and National Science Foundation.	control: 55 caregivers/56 care recipients Characteristics Caregivers Age in years [Mean (SD)]: • Dual target = 50.7 (14.3) • Caregiver only = 53.7 (14.3) • Written information control = 53.4 (15.8) Gender (M/F): • Dual target (N): 9/48 • Caregiver only (N): 14/42 • Written information control (N): 19/41 Time in caregiving role in years [Mean (SD)]: • Dual target = 8.4 (8.4) • Caregiver only = 7.7 (7.8) • Written information control = 9.0 (10.6) <i>Care recipients</i> Age in years [Mean (SD)]: • Dual target = 53.4 (12.7) • Caregiver only = 57.7 (12.5) • Written information control = 54.4 (13.2)	based support group sessions, consisting of up to 6 caregivers, were interspersed throughout study period. Caregivers were also given a smart phone and notebook, containing information on SCI, ageing and caregiving, as well as information community resources and programmes. This phone was also used for the telephone support groups. • Sessions Targeted 5 areas of caregiver risk: lack of knowledge regarding caregiving and caregiver burden; social support; emotional well-being; communication; and physical health. However, the intervention was designed to be flexible and tailored towards the needs of individual carers, based on risk profiles from baseline assessment. These areas of concentration for following sessions were negotiated between facilitator and caregiver during the 2nd session, as well as issues of health and well-being in the care dyad. Each subsequent home visits focused on communication problems and coping strategies, emotional well-being and managing stress, and social support respectively. The final intervention session was a review of the major topics and	 (N=45): 4.32 (1.96) Written information control (N=56): 4.82 (1.71) Social integration [mean (SD)] At 12 months follow-up: Dual target (N=50): 8.51 (3.62) Caregiver only (N=45): 9.38 (2.91) Written information control (N=56): 10.02 (2.75) 	to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware of their assigned intervention during the trial? PN 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? PY 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PN 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were

Study details Particip	ants	Interventions	Outcomes and Results	Comments
• Careg • Written control Time sim not report Injury care Location (lumbar/ • Dual ta • Careg (N): 2/ • Written control Inclusion Caregive • Be age above • Provid emotion signific for $\ge p$ • Have a with in (define face-to month contac	arget (N): 41/16 iver only (N): 18/38 n information I (N): 27/33 nee injury in years: orted ause: not reported ause: not reported of SCI (thoracic/cervical) arget (N): 3/14/29 iver only 16/30 n information I (N): 4/21/29 on criteria ers had to: ed 18 years or	 coping mechanisms learnt. <i>Education</i> <i>facilitators</i> Professionals in psychology or social care disciplines, who received session training. This included reading materials, structured role play and practice opportunities, and 3 cross-site training calls on the intervention. Counsellors were certified by principal investigators, reviewed at 6months and received weekly supervision from investigators. An assessment form was completed after each contact with a caregiver to ensure continuity. <i>Dual target intervention</i> Caregiver component as described above. Care recipient portion designed to educate care recipient in SCIs, stress management, self-care and emotional well-being, as well as increasing access to both formal and informal support. Also provided information on the emotional and physical impact of caring on caregivers. Received a screen phone if participants lived separately to their caregiver, and a written information pack on SCI, ageing and local resources. <i>Sessions</i> Delivered over 7 individual intervention sessions - 5 at home and 2 via telephone, following the same 		randomised? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 3: Missing outcome</u> <u>data</u> 3.1 Were data for this outcome available for all, or nearly all, participants randomised? Y 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? NI 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PY 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? PN - proportions and reasons similar <i>Risk-of-bias judgement:</i> Low risk <u>Domain 4: Risk of bias in</u> <u>measurement of the</u> <u>outcome</u> 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome

Study details	Participants	Interventions	Outcomes and Results	Comments
	 individual with SCI Competent in English language Have a telephone Be planning on remaining in the geographical area for the next 6 months Care recipients had to: Be aged 35 years or older Have an SCI through either injury or disease Complete or incomplete lesion as defined by American Spinal Cord Injury Association Have impaired mobility due to the SCI Living in the community (non-group setting) for at least 1 year after SCI Competent in English language Have a telephone Be planning on remaining in the geographical area for the next 6 months Exclusion criteria Either caregiver or care recipient: Terminal illness with a life expectancy of 	schedule as caregiver only group. Five group support sessions were also held over the telephone, with other SCI care recipients.		assessors aware of the intervention received by study participants? No 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? NA 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 5: Risk of bias in</u> <u>selection of the reported</u> <u>result</u> 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN

 In a car ma or Bli Co (della car) 	nonths active treatment for ancer (excluding aintenance tamoxifen lupron treatment) ind or deaf ognitive impairment efined as ≥ 4 errors on			<i>Risk-of-bias judgement:</i> Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> Some concerns
	anort Portable Mental atus Questionnaire)			Other information None.
 Wiechman, S. A., Carrougher, G. J., Esselman, P. C., Klein, M. B., Martinez, E. M., Engrav, L. H., Gibran, N. S., An expanded delivery model for outpatient burn rehabilitation, Journal of burn care & research, 36, 14-22, 2015 Ref Id 1036605 Country/ies where the study was carried out USA Study type RCT N= 8 Motion Mathematical NOT State Mathematical Not construct Not construct Not construct Not construct State Mathematical Not constru	nple size 81 (randomised) otivational terviewing: 40 candard care: 41 81 (analysed) otivational terviewing: 40 candard care: 41 TE Mentions that 3 icipants dropped out doesn't mention at it part of the study. fracteristics in years [Mean (SD)]: otivational interviewing 43.23 (16.92) candard care = 43.68 7.13)	 Interventions Once participants were enrolled in the study, they completed a goal attainment scale (before randomisation). Follow-up assessments were scheduled at 6 months and 12 months from baseline. <i>Control group</i> Received standard outpatient care from clinic. This included discharge education prior to discharge and a 24-hour post-discharge follow-up telephone call from the primary care nurse to ensure a smooth transition. Outpatient clinic visits were initially scheduled every 2 weeks as needed and then every 1-2 months until no longer necessary. Outpatient appointments included a multidisciplinary team i.e. nurse, surgeon, physical and occupational therapist, vocational counsellor and psychologist. The control group also received an 	Results Quality of life (SF-12 Mental component score) [mean (SD)] At 6 months: • Motivational interviewing: 51.1 (8.6) • Standard care: 49.2 (11.5) At 12 months: • Motivational interviewing: 51.2 (10.0) • Standard care: 46.8 (12.5) Quality of life (SF-12 Physical component score) [mean (SD)] At 6 months:	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? NI 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? NI 1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process? PN <i>Risk-of-bias judgement:</i> Some concerns Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to

Study details	Participants	Interventions	Outcomes and Results	Comments
outpatient expanded care co-coordinator to assist with management of burn issues, provide motivational interviewing, and facilitate coping with social and community issues. Study dates Not reported Source of funding This study received funding from the National Institute on Disability and Rehabilitation Research in the U.S. Department of Education.	Gender (M/F): • Motivational interviewing (N): 25/15 • Standard care (N): 29/12 Time since injury in years: not reported Injury cause: not reported Length of hospitalisation in days [Mean (SD)]: • Motivational interviewing: 19.15 (19.28) • Standard care: 18.42 (18.54) % total burn surface area [Mean (SD)]: • Motivational interviewing: 35.50 (42.91) • Standard care: 38.00 (43.37) Inclusion criteria Participants had to: • 18 years old or above • Burn size: • Greater than 15% • Less than 15% and requiring surgical closure	 introductory letter describing contact times at 6 and 12 months post-discharge, to collect outcome measurements. <i>Intervention group</i> Motivational interviewing plus standard outpatient care from clinic and welcome letter as described above. The introductory letter also contained details of a telephone call schedule with an expanded care coordinator (ECC). Intervention group participants were contacted by the ECC at 24-48 hours post-discharge, at weeks 2, 4, 8 and 12, and months 5, 7 and 9. Conversations were semi-structured for consistency, with the first bit of the call devoted to medical and psychological issues that participants may have encountered. The second part of each call utilised motivational interviewing and was focused on the reviewing participant goals and any progress made towards them. Additionally, the ECC could identify local support resources for participants, accompany them to clinic visits, and help with compensation. <i>Motivational interviewing</i> A patient-centred, directive method aimed at enhancing a person's desire to change. The content of this intervention was based on a biopsychosocial 	 48.8 (8.0) Standard care: 44.1 (11.9) At 12 months: Motivational interviewing: 50.1 (11.8) Standard care: 53.7 (15.3) Patient satisfaction (Satisfaction with social support) [mean (SD)] At 6 months: Motivational interviewing: 8.9 (1.6) Standard care: 8.4 (2.1) At 12 months: Motivational interviewing: 9.0 (1.3) Standard care: 7.5 (3.0) Changes in activity of daily living (GAS) [mean (SD)] at 6 months: Motivational interviewing: 55.5 (13.5) Standard care: 58.1 (14.8) at 12 months: 	 <u>intervention</u>) 2.1. Were participants aware of their assigned intervention during the trial? NI - described as single-blind but not description of who was blinded. 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? NI - described as single-blind but not description of who was blinded. 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PN - semi-structured telephone calls 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y 2.7 If No/PN/NI to 2.6: Was there potential for a

Study details	Participants	Interventions	Outcomes and Results	Comments
	 Less than 15% and located on face, hand, or over the joint Informed written consent for study participation Exclusion criteria Not reported. See above for inclusion criteria. 	 model of burn recovery, which premises that the outcomes of bun injury are reliant on a combination of pre-injury physical and emotional states, characteristics of the injury, hospitalisation experience and healthcare experiences. <i>ECC professional</i> Received several months of training and close supervision from primary investigator. Training included an introduction to the burn team, overview of the pathophysiology of burns and treatment, training in motivational interviewing, counselling and crisis intervention. Assistance was available from an experienced multi-disciplinary team, should the EEC have any issues during the calls. Supplementary support services such as burn support groups and burn advocacy services were also available to the control group but this was advertised through brochures or posters in the hospital waiting area. 	 Motivational interviewing: 59.0 (14.2) Standard care: 57.9 (13.6) 	substantial impact (on the result) of the failure to analyse participants in the group to which they were randomised? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 3: Missing outcome data</u> 3.1 Were data for this outcome available for all, or nearly all, participants randomised? Y 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? NA 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? NA 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 4: Risk of bias in measurement of the outcome</u> 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN

Study details	Participants	Interventions	Outcomes and Results	Comments
				 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants? NI - described as single-blind but not description of who was blinded. 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? Y 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? PN <i>Risk-of-bias judgement:</i> Some concerns Domain 5: Risk of bias in selection of the reported result 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales,

Study details	Participants	Interventions	Outcomes and Results	Comments
				definitions, time points) within the outcome domain? Y - RTW recorded but not reported. 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i> High risk <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i> High risk Other information None.
Full citationZidén, L., Frändin, K., Kreuter, M., Home rehabilitation after hip fracture. A randomized controlled study on balance confidence, physical function and everyday activities, Clinical Rehabilitation, 22, 1019-1033, 2008Ref Id 1093137Country/ies where the study was carried out SwedenStudy type	 Sample size N= 212 (randomised) Supported discharge: 105 Standard care and rehab: 107 N= 102 (analysed) Supported discharge: 48 Standard care and rehab: 54 Characteristics Age in years [Mean (SD)]: Supported discharge = 81.2 (5.9) Standard care and rehab = 82.5 (7.6) 	 Interventions Self-report and clinical data were collected at baseline and 1 month follow-up. Control group Standard care and rehabilitation. This included early mobilisation of patients, preferably within 48 hours, as well as information on their surgical treatment, prognosis and the important of physical activity. The standard rehabilitation programme consisted of individual daily training to include everyday tasks, transfer techniques, training with technical aids and stair walking. Group-based physiotherapy and occupational therapy training sessions were also provided. Rehabilitation measures were adapted to individual needs and 	Results <i>Changes in ADL</i> <i>(Instrumental</i> <i>Activity Measure) [mean</i> <i>(SD)]</i> At 1 month follow-up: • Supported discharge: 52.2 (9.5) • Standard care and rehab: 33.5 (16.7)	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomisation process 1.1 Was the allocation sequence random? NI 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? Y 1.3 Did baseline differences between intervention groups suggest a problem with the randomization process? PN Risk-of-bias judgement: Some concerns

Study details	Participants	Interventions	Outcomes and Results	Comments
RCT Aim of the study To investigate the effect of a home-based rehabilitation programme emphasising self-efficacy and physical activity on balance confidence, physical function and physical activity in early hip fracture, when compared to standard care. Study dates Recruitment: November 2004 to February 2006. Source of funding This study received funding from the Vårdal Institute, the Hjalmar Svensson's Foundation and the Geriatric Section of the Swedish Association of Registered Physiotherapists.	Gender (M/F): • Supported discharge (N): 19/29 • Control (N): 12/42 Time since injury in years: not reported Injury cause: not reported Inclusion criteria Participants had to: • Be aged 65 years or older • Have had acute hip fracture surgery • Be medically approved by responsible geriatric doctors as being in need of geriatric care and rehabilitation • Be able to communicate in Swedish Exclusion criteria • Severe medical illness with an anticipated survival of less than one year • Severe drug or alcohol abuse • Mental illness or severe cognitive impairment	 personal goals. Intervention group Standard care and rehabilitation, plus supported discharge for home rehabilitation. While in hospital, patients were offered an individually tailored rehabilitation programme with increased support from a multi- disciplinary team (including occupational therapist and physiotherapist). Prior planning and close contact with social home service and a family support network was utilised for a smooth discharge and initial period (maximum 3 weeks) at home. Where possible, the same occupational therapist and physiotherapist attended participants during home visits for continuity. Motivational interviewing An initial meeting between the participant was used to provide programme information and establish personal goals. The home rehabilitation included multi-disciplinary efforts to increase a patient's motivation and self-efficacy. Physiotherapy concentrated on confidence in locomotion and physical activity, with an emphasis was placed on outdoor ambulation. Occupational therapy concentrated on safety and independence in activities of daily life. 		Domain 2: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) 2.1. Were participants aware of their assigned intervention during the trial? PY 2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? Y 2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context? PN 2.4. If Y/PY to 2.3: Were these deviations from intended intervention balanced between groups? NA 2.5 If No/PN/NI to 2.4: Were these deviations likely to have affected the outcome? NA 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? Y - ITT analysis 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the

Study details	Participants	Interventions	Outcomes and Results	Comments
		 Depending on the needs of the participant, assistant nurses or assistant physiotherapists could make home visits to assist with home training. 		group to which they were randomised? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 3: Missing outcome</u> <u>data</u> 3.1 Were data for this outcome available for all, or nearly all, participants randomised? Y 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? NA 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? NA 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? NA <i>Risk-of-bias judgement:</i> Low risk <u>Domain 4: Risk of bias in</u> <u>measurement of the</u> <u>outcome</u> 4.1 Was the method of measuring the outcome inappropriate? PN 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? PN 4.3 If No/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the

Study details	Participants	Interventions	Outcomes and Results	Comments
				intervention received by study participants? Y 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? Y 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? PN <i>Risk-of-bias judgement:</i> Some concerns Domain 5: Risk of bias in selection of the reported result 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalised before unblinded outcome data were available for analysis? NI Is the numerical result being assessed likely to have been selected, on the basis of the results, from 5.2 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PN 5.3 multiple analyses of the data? PN <i>Risk-of-bias judgement:</i>

Study details	Participants	Interventions	Outcomes and Results	Comments
				Some concerns <u>Overall risk of bias</u> <i>Risk-of-bias judgement:</i>
				Some concerns
				Other information None.

1 ADL: Activities of daily living; AIS: American Spinal Injury Association Impairment Scale; BDI: Beck Depression Inventory; BSHQ: Burn Specific Health Questionnaire; BSI: Brief

2 Symptom Index; CBT: Cognitive behavioural therapy; CHART-SF; Short-form Craig Handicap Assesment and Reporting Technique; CES-D: Center for Epidemiologic Studies

3 depression scale; CI: Confidence interval; F: Female; GAS: Goal Attainment Score; HABITS: Healthy Active Behavioural Intervention in SCI; HADS: Hospital Anxiety and

4 Depression scale; HR-QoL: Health-related quality yof life; IMPACT-S; ICF Measure of Participation and Activities questionnaire – screening; ITT: Intention to treat; IQR:

5 Interquartile range; M: Male; MET: Metabolic equivalent; MHI-5; 5-item Mental Health Inventory; min: Minute; MS: Multiple sclerosis; N: Number [or No if answering a risk of

6 bias checklist question]; NA: Not applicable; NI: No information; PASIPD; Physical Activity Scale for Individuals with Physical Disabilities; PHQ-9: 9-item Patient Health

7 Questionnaire; PN: Probably not; PY: Probably yes; QoL: Quality of life; RCT: Randomised controlled trial; RoB2: Revised Cochrane risk of bias tool; SCI: Spinal cord injury;

8 SCIM3: Spinal Cord Independence Measurement III; SD: Standard deviation; SF-12; 12-item short form health survey; SF-36; 36-item short form health survey; STAI: State

9 Trait Anxiety Inventory; WHOQOL-5: 5-item World Health Organization quality of life questionnaire; Y: Yes

10 Clinical evidence tables for review question: B.3b What psychological and psychosocial rehabilitation interventions are

11 effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?

12 Table 8: Clinical evidence tables

Study details	Participants	Interventions	Outcomes and Results	Comments
Full citation Maskell, J., Newcombe, P., Martin, G., Kimble, R., Psychological and psychosocial functioning of children with burn scarring using cosmetic camouflage: A multi- centre prospective randomised controlled trial, Burns, 40, 135-	Sample size N= 63 (randomised) • Skin camouflage: 35 • Wait-list: 28 N= 41 (analysed) • Skin camouflage: 24 • Wait-list: 17 Characteristics Age in years [Mean (SD)]: • Skin camouflage =	 Interventions Baseline questionnaires were administered 2 weeks before the start of the study, and follow-up questionnaires 2 weeks before the end of the study. Child versions and adult versions were provided. Control group Wait-list control Intervention group Participants and caregivers attended a 1.5 day Microskin[™] training before being provided with the relevant equipment to begin using the product at home. 	Overall quality of life (measured using PedsQL4.0 Total score) [Mean (SD)] At 8 weeks follow-up (from baseline): • Skin camouflage: 83.57 (10.03) • Wait-list control: 79.93 (15.16)	Limitations Quality assessment: Risk of bias assessed using revised Cochrane risk of bias tool (RoB 2) Domain 1: Risk of bias arising from the randomization process 1.1 Was the allocation sequence random? Y – computer-generated random numbers 1.2 Was the allocation sequence concealed until

Study details	Participants	Interventions	Outcomes and Results	Comments
Children's Medical Research Institute PhD Scholarship programme), Royal Children's Hospital, Queensland Health and Microskin™ International (researcher travel costs and supply of skin camouflage).	 Be aged 8 to 16 years old Have a burn past the acute stage of healing, with mature scarring on a visible body area. Exclusion criteria Cognitive impairment that may affect the use of self-reported outcome measurement or intervention Limited English language proficiency Psychological difficulties or co-morbidity that may confound findings 			 2.7 If No/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomized? NA <i>Risk-of-bias judgement: High risk</i> Domain 3: Missing outcome data 3.1 Were data for this outcome available for all, or nearly all, participants randomized? N - high attrition rate. Data only available for 24/35 in skin camouflage group and 17/28 for wait-list group. 3.2 If No/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data? N - no information provided of analysis methods correcting for bias or sensitivity analysis 3.3 If No/PN to 3.2: Could missingness in the outcome depend on its true value? PN 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? NA <i>Risk-of-bias judgement: Low risk</i> Domain 4: Risk of bias in measurement of the outcome

Study details	Participants	Interventions	Outcomes and Results	Comments
				inappropriate? PN
				4.2 Could measurement or
				ascertainment of the outcome
				have differed between intervention groups? PY - once
				wait-list participants and
				caregivers were aware of the
				intervention available, may
				have lead to more optimistic
				self-report outcomes. 4.3 If No/PN/NI to 4.1 and 4.2:
				Were outcome assessors
				aware of the intervention
				received by study participants?
				PY - self report questionnaires
				4.4 If Y/PY/NI to 4.3: Could assessment of the outcome
				have been influenced by
				knowledge of intervention
				received? PY - self report
				questionnaires
				4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome
				was influenced by knowledge of
				intervention received? PY
				Risk-of-bias judgement: High
				risk
				Domain 5: Risk of bias in
				selection of the reported result 5.1 Were the data that
				produced this result analysed in
				accordance with a pre-specified
				analysis plan that was finalized
				before unblinded outcome data
				were available for analysis? NI
				Is the numerical result being assessed likely to have been

Study details	Participants	Interventions	Outcomes and Results	Comments
				selected, on the basis of the results, from
				5.2 multiple outcome
				measurements (e.g. scales,
				definitions, time points) within the outcome domain? PN -
				multiple outcome
				measurements but all reported
				in paper
				5.3 multiple analyses of the data? PN - multiple analyses
				but all reported in paper
				Risk-of-bias judgement Some concerns
				Overall risk of bias
				Risk-of-bias judgement: High
				risk
				Other information
				None.

F: Female; ITT: Intent to treat; M: Male; N: Number [or No if answering a risk of bias checklist question); NA: Not applicable; NI: No information; PedsQL 4.0; Pediatric Quality of Life Index (4th version); PN: Probably not; PY: Probably yes; SD: Standard deviation; TM: Trademark; Y: Yes

3

4 Appendix E – Forest plots

5 Forest plots for review question: B.3a What psychological and psychosocial

6 rehabilitation interventions are effective and acceptable for adults with

7 complex rehabilitation needs after traumatic injury?

- 8 No meta-analyses were performed as the interventions or outcomes were either not
- 9 sufficiently similar to allow them to be combined or they were not reported by more than one10 study.

11 Forest plots for review question: B.3b What psychological and psychosocial

12 rehabilitation interventions are effective and acceptable for children and young

13 people with complex rehabilitation needs after traumatic injury?

- 14 No meta-analyses were performed as the interventions or outcomes were either not
- sufficiently similar to allow them to be combined or they were not reported by more than onestudy.

1 Appendix F – GRADE tables

2 GRADE tables for review question: B.3a What psychological and psychosocial rehabilitation interventions are effective and 3 acceptable for adults with complex rehabilitation needs after traumatic injury?

4 Table 9: Clinical evidence profile for psychological therapies for adjustment and engagement: motivation intervention versus 5 standard post-operative care

	Quality assessment						No of p	patients	Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Motivation intervention	Standard post- operative care	Relative (95% Cl)	Absolute	Quality	Importance
Overall qua	lity of life: Ph	ysical func	tioning (SF-36; sca	le not reported; k	petter indicated	by higher v	alues) [at 6 mo	nths]				
1 (Allegrante 2007)	randomise d trials	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	27	-	MD 5 higher (8.95 lower to 18.95 higher)	LOW	CRITICAL
Overall qua	lity of life: Ge	neral healt	h (SF-36; scale not	reported; better	indicated by hig	gher values)	[at 6 months]					
1 (Allegrante 2007)	randomise d trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	32	27	-	MD 6 higher (6.13 lower to 18.13 higher)	VERY LOW	CRITICAL
Overall qua	lity of life: Me	ental health	(SF-36; scale not r	eported; better ir	dicated by hig	her values)	[at 6 months]					
1 (Allgrante 2007)	randomise d trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	32	27	-	MD 7 higher (2.62 lower to 16.62 higher)	VERY LOW	CRITICAL
Pain: Bodily	/ pain (SF-36;	scale not r	reported; better ind	icated by higher	values) [at 6 m	onths]						
1 (Allegrante 2007)	randomise d trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	32	27	-	MD 0 higher (12.64 lower to 12.64 higher)	VERY LOW	IMPORTANT

6 CI: confidence interval; MD: mean difference; SF-36: 36 item short-form survey

7 1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

8 2 95% CI crosses 1 MID (for SF-36 general health +/-13.0; for SF-36 mental health +/-10.0)

9 3 95% CI crosses 2 MIDs (for SF-36 bodily pain +/-12.0)

1Table 10: Clinical evidence profile for psychological therapies for adjustment and engagement: interpersonal counselling versus2standard care

	Stanuaru	cure										
			Quality assessm	ent			No of pat	tients		Effect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Interpersonal counselling	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Changes	in mood: Depre	ession (BDI	; range 0-63; better	indicated by low	ver values) - at 3	3 months						
1 (Holmes 2007)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	27	31	-	MD 3.3 higher (2.12 lower to 8.72 higher)	VERY LOW	CRITICAL
Changes	in mood: Depre	ession (BDI	; range 0-63; better	indicated by low	ver values) - at 6	6 months						
1 (Holmes 2007)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	27	31	-	MD 0 higher (5.85 lower to 5.85 higher)	VERY LOW	CRITICAL
Changes	in mood: Depre	ession (HAD	OS; range 0-21; bet	ter indicated by lo	ower values) - a	at 3 month	s					
1 (Holmes 2007)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	27	31	-	MD 1.3 higher (1.06 lower to 3.66 higher)	VERY LOW	CRITICAL
Changes	in mood: Depre	ession (HAD	OS; range 0-21; bet	ter indicated by lo	ower values) - a	at 6 month	s					
1 (Holmes 2007)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	27	31	-	MD 0.7 higher (2.71 lower to 4.11 higher)	VERY LOW	CRITICAL
Changes	in mood: Anxie	ety (HADS; I	range 0-21; better i	ndicated by lowe	r values) - at 3	months						
1 (Holmes 2007)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	27	31	-	MD 0.6 higher (1.73 lower to 2.93 higher)	VERY LOW	CRITICAL
Changes	in mood: Anxie	ety (HADS; I	range 0-21; better i	ndicated by lowe	r values) - at 6	months						
1 (Holmes 2007)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	27	31	-	MD 1.3 lower (4.29 lower to 1.69 higher)	VERY LOW	CRITICAL

3 BDI: Beck depression inventory; CI: confidence interval; HADS: Hospital anxiety and depression scale; MD: mean difference

4 1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

5 2 95% CI crosses 1 MID (for BDI +/-4.8; for HADS Depression +/-2.25; for HADS Anxiety +/-2.5)

6 3 95% CI crosses 2 MIDs (for BSI +/-4.8; for HADS Depression +/-2.25)

Table 11: Clinical evidence profile for psychological therapies for adjustment and engagement: peer support telephone call service 1 2 versus standard care

			Quality assessn	nent			No of patients			Effect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Peer support telephone call service	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Changes	in mood: Depre	ession (PHC	Q-9; range 0-27; bet	ter indicated by I	ower values) [a	t 6 months	follow-up]					
1 (Mercier 2015)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	53	53	-	MD 1 lower (2.64 lower to 0.64 higher)	LOW	CRITICAL
Changes in activity of daily living: Physical independence scale (CHART-SF; range 0-100; better indicated by higher values) [at 6 months follow-up]												
1 (Mercier 2015)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	53	53	-	MD 2 higher (10.71 lower to 14.71 higher)	MODER ATE	IMPORTANT

3 CHART-SF: Short form Craig handicap assessment and reporting technique; CI: confidence interval; PHQ-9: 9 item patient health questionnaire MD: mean difference

1 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2

4 5 2 95% CI crosses 1 MID (for PHQ-9 +/-2.3)

Table 12: Clinical evidence profile for psychological therapies for adjustment and engagement: on-line based cognitive behavioural 6 therapy (CBT) versus waitlist control 7

			Quality asses	sment			No of p	atients	Eff	ect		
No of studies	s Design Risk of bias Inconsistency Indirectness Imprecision					Other considerations	On-line based CBT	Waitlist control	Relative (95% Cl)	Absolute	Quality	Importance
Changes in	n mood – dep	ression: D	epression, Anxiety	and Stress Scale	(DASS21; range	0-42; bette	er indicated by	lower values) [a	after interventio	on completion (10-12 weeks 1	rom baseline)]
1 (Migliorini 2016)	randomised trials		no serious inconsistency	serious ²	serious ³	none	23	25	-	MD 2.7 lower (9.24 lower to	VERY LOW	IMPORTANT

										3.84 higher)		
Changes in	mood – anxi	ety: Depr	ession, Anxiety an	d Stress Scale (DAS	SS21; range 0-42	better ind	dicated by lowe	er values) [after	intervention c	ompletion (10-1	2 weeks from	baseline)]
	randomised trials		no serious inconsistency	serious ²	very serious ⁴	none	23	25	-	MD 0.2 lower (4.76 lower to 4.36 higher)	VERY LOW	IMPORTANT

- 1 *CI: Confidence interval; MD: Mean difference*
- 2 1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2
- 3 2 Population is indirect: mix of traumatic and non-traumatic patients (exact numbers were not reported)
- 4 3 95% CI crosses 1 MID (for DASS21: Depression +/- 5.40)
- 5 4 95% CI crosses 2 MID (for DASS21: Anxiety +/- 4.20)

Table 13: Clinical evidence profile for psychological therapies for adjustment and engagement: CBT-based psychotherapy versus standard care

	Quality assessment						No of pati	ents	Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	CBT-based psychotherapy	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Overall qu	ality of life: He	alth-related	Quality of Life (HF	R-QoL; scale not	reported; better	r indicated	d by higher values)	[at 6 months	post traum	a]		
1 (Pirente 2007)	randomised trials	very serious ¹	no serious inconsistency	serious ²	serious ³	none	45	47	-	MD 0.06 lower (0.14 lower to 0.02 higher)	VERY LOW	CRITICAL
Changes i	n mood: Depre	ession (BDI;	; range 0-63; better	indicated by low	er values) - at 6	6 months	oost trauma					
1 (Pirente 2007)	randomised trials	very serious ¹	no serious inconsistency	serious ²	no serious imprecision	none	45	47	-	MD 0.7 higher (3.06 lower to 4.46 higher)	VERY LOW	CRITICAL
Changes i	in mood: Depre	ession (BDI;	; range 0-63; better	indicated by low	er values) - at 1	2 months	post trauma					
1 (Pirente 2007)	randomised trials	very serious ¹	no serious inconsistency	serious ²	no serious imprecision	none	45	47	-	MD 1.8 higher (1.63 lower to 5.23 higher)	VERY LOW	CRITICAL
Changes i	n mood: Anxie	ty (STAI ; s	cale not reported;	better indicated b	y lower values) - at 6 mo	onths post trauma					
1 (Pirente 2007)	randomised trials	very serious ¹	no serious inconsistency	serious ²	serious ³	none	45	47	-	MD 2.96 higher (1.66 lower to 7.58 higher)	VERY LOW	CRITICAL
Changes i	n mood: Anxie	ety (STAI ; s	cale not reported;	better indicated b	y lower values) - at 12 m	onths post trauma					
1	randomised	very	no serious	serious ²	serious ³	none	45	47	-	MD 3.69 higher	VERY	CRITICAL

DRAFT FOR CONSULTATION Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

			Quality assessm	ent			No of pati		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	CBT-based psychotherapy	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
(Pirente 2007)	trials	serious ¹	inconsistency							(0.94 lower to 8.32 higher)	LOW	
Changes	in mood: Anxie	ety (SSCS5	SCL-4 Symptom C	hecklist Subscale	e 5 anxiety sco	re) - at 6 n	nonths post trauma	a				
1 (Pirente 2007)	randomised trials	very serious ¹	no serious inconsistency	serious ²	serious ³	none	45	47	-	MD 13.1 higher (0.11 to 26.09 higher)	VERY LOW	CRITICAL
Changes	in mood: Anxie	ety (SSCS5	SCL-4 Symptom C	hecklist Subscale	e 5 anxiety sco	re) - at 12	months post traum	na				
1 (Pirente 2007)	randomised trials	very serious ¹	no serious inconsistency	serious ²	serious ³	none	45	47	-	MD 13.8 higher (0.35 to 27.25 higher)	VERY LOW	CRITICAL

1 BDI: Beck depression inventory; CBT: Cognitive behavioural therapy; CI: confidence interval; HRQoL: Health-related quality of life; MD: mean difference; SSCS5: Subscale 5

2 (anxiety) of symptoms checklist 90-R; STAI: State subscale from stair-anxiety anxiety inventory

3 1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

4 2 Population is indirect (includes moderate traumatic brain injury)

5 3 95% CI crosses 1 MID (for HR-QoL +/-0.1; for STAI +/-5.65, for SSCS5 +/-15.225)

6 Table 14: Clinical evidence profile for family support: caregiver education and support versus written information pack

			Quality assess	ment			No of	patients	E	ffect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Caregiver education and support	Written information pack	Relative (95% Cl)	Absolute	Quality	Importance
Overall q	uality of life: H	lealth symp	toms (range 0-8; be	tter indicated by I	ower values) [at	12 months f	follow-up]					
1 (Schulz 2009)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	45	56	-	MD 0.5 lower (1.23 lower to 0.23 higher)	LOW	CRITICAL
Overall q	uality of life: S	Social integr	ation (range 0-15; b	etter indicated by	higher values) [at 12 month	s follow-up]					

DRAFT FOR CONSULTATION Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

			Quality assess	ment			No of	patients	E	ffect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Caregiver education and support	Written information pack	Relative (95% Cl)	Absolute	Quality	Importance
1 (Schulz 2009)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	45	56	-	MD 0.64 lower (1.77 lower to 0.49 higher)	LOW	CRITICAL
Changes	in mood: Dep	ression (CE	S-D; range 0-30; be	tter indicated by I	ower vales) [at 1	2 months fo	llow-up]					
1 (Schulz 2009)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	45	56	-	MD 0.73 lower (3.26 lower to 1.8 higher)	LOW	CRITICAL

CES-D: Center for epidemiologic studies depression scale; CI: confidence interval; MD: mean difference 1 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2

3 2 95% CI crosses 1 MID (for Health symptoms +/-0.99; for Social Integration +/-1.485; for CES-D +/-2.955)

Table 15: Clinical evidence profile for family support: dual target caregiver and care recipient education and support versus written 4 information pack 5

			Quality assess	ment			No of	patients	E	ffect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Dual target	Written information pack	Relative (95% Cl)	Absolute	Quality	Importance
Overall q	uality of life: H	lealth symp	toms (range 0-8; be	etter indicated by	lower values) [at	12 months	follow-up]					
1 (Schulz 2009)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	50	56	-	MD 0.98 lower (1.69 to 0.27 lower)	LOW	CRITICAL
Overall q	uality of life: S	Social integr	ation (range 0-15; k	better indicated by	y higher values)	[at 12 montl	hs follow-up]					
1 (Schulz	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	50	56	-	MD 1.51 lower (2.75 to	LOW	CRITICAL

Rehabilitation after traumatic injury: evidence reviews for psychological and psychosocial interventions in adults DRAFT (July 2021)

1 2

	Quality assessment						No of patients		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Dual target	Written information pack	Relative (95% Cl)	Absolute	Quality	Importance
2009)										0.27 lower)		
Changes	in mood: Dep	ression (CE	S-D; range 0-30; be	tter indicated by l	ower vales)) [at [·]	12 months fo	ollow-up]					
1 (Schulz 2009)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	50	56	-	MD 0.93 lower (3.27 lower to 1.41 higher)	LOW	CRITICAL

1 CES-D: Center for epidemiologic studies depression scale; CI: confidence interval; MD: mean difference

1 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2

2 3 2 95% CI crosses 1 MID (for Health symptoms +/-0.99; for Social Integration +/-1.485; CES-D +/-2.955)

Table 16: Clinical evidence profile for self-management interventions: Trauma Support Network versus standard care 4

	Quality assessment						No of patients		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Trauma Support Network	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Overall qu	ality of life: me	ntal compo	onent score (SF-12	; scale not repor	ted; better indic	ated by high	ner values) [at 6	6 months (fro	m baseline)]		
1 (Castillo 2013)	observational studies	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	126	125	-	MD 3.4 higher (0.32 lower to 7.12 higher)	LOW	CRITICAL
Overall qu	ality of life: phy	sical com	ponent score (SF-1	2; scale not repo	orted; better ind	icated by hi	gher values) [at	t 6 months (fr	om baselin	e)]		
1 (Castillo 2013)	observational studies	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	126	125	-	MD 1.4 higher (1.67 lower to 4.47 higher)	LOW	CRITICAL
Changes i	in mood: Depre	ssion (PHC	2-9; range 0-27; bet	tter indicated by	lower values) [a	t 6 months	(from baseline)]				
1 (Castillo	observational	very	no serious	no serious	serious	none	126	125	-	MD 2.2 lower (3.75 to 0.65	VERY	CRITICAL

	Quality assessment						No of patients		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Trauma Support Network	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
2013)	studies	serious ¹	inconsistency	indirectness	imprecision ²					lower)	LOW	
Changes i	in mood: Anxiet	y (BSI; sca	le not reported; b	etter indicated by	lower values) [at 6 months	(from baseline	e)]				
1 (Castillo 2013)	observational studies	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	126	125	-	MD 0 higher (0.19 lower to 0.19 higher)	LOW	CRITICAL

BSI: Brief symptom inventory; CI: confidence interval; MD: mean difference; PHQ-9: 9 item patient health questionnaire; SF-12: 12 item short-form survey 1 Very serious risk of bias in the evidence contributing to the outcomes as per ROBINS-I

2

3 2 95% CI crosses 1 MID (for PHQ-9 +/-3.25)

1

Table 17: Clinical evidence profile for self-management interventions: educationally based group therapeutic programme versus 4 5 waitlist control

	Quality assessment						No of patients		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Group therapeutic programme	Waitlist control	Relative (95% Cl)	Absolute	Quality	Importance
Changes i	n mood: Patie	nt Health	Questionnaire 9-Ite	em (PHQ-9; range 0	-27; better indica	ted by lov	wer values) - at 6 we	eks from base	line (after int	ervention comple	tion)	
1 (Coker 2019)	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ³	none	41	40	-	MD 0.36 higher (1.96 lower to 2.68 higher)	VERY LOW	IMPORTANT
Changes i	n mood: Patie	nt Health	Questionnaire 9-Ite	em (PHQ-9; range 0	-27; better indica	ted by lov	wer values) - at 24 v	veeks after inte	rvention com	pletion (Better in	dicated by	lower values)
1 (Coker 2019)	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ³	none	41	40	-	MD 0.6 higher (1.80 lower to 3.00 higher)	VERY LOW	IMPORTANT

6 CI: Confidence interval; MD: Mean difference

- 1 1 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2
- 2 2 Population is indirect: mix of traumatic and non-traumatic patients (exact numbers were not reported)
- 3 95% CI crosses 1 MID: (for PHQ-9 +/-2.53)

4 Table 18: Clinical evidence profile for self-management interventions: group learning programme versus standard care

	Quality assessment						No of patients		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Group learning programme	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Changes i	in activities of	daily living:	Barthel ADL Index	(range 0-20; bett	er indicated by	higher va	alues) [at intervo	ention complet	ion]			
1 (Elinge 2003)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious imprecision ²	none	21	14	Median (IQR): 20 (12- 20) ³	Median (IQR): 19 (16-20) ³	VERY LOW	IMPORTANT
Changes i	in activities of	daily living:	Barthel ADL Index	(range 0-20; bett	er indicated by	higher va	alues) [at 12 mo	onths after inter	vention com	oletion]		
1 (Elinge 2003)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious imprecision ²	none	18	12	Median (IQR): 20 (18- 20) ³	Median (IQR): 19 (17-20) ³	VERY LOW	IMPORTANT

5 ADL: Activities of daily living; CI: confidence interval; IQR: interquartile range

6 1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

7 2 Imprecision could not be assessed using GRADE default values due to no reporting of SD and no published MIDs so was instead assessed using the sample size: The result

8 was not downgraded if $n \ge 400$, if n = 399-200, the result was downgraded 1 level, and if n < 200 the result was downgraded by 2 levels. Very serious risk of bias in the evidence 9 contributing to the outcomes as per RoB 2

10 3 According to the statistical analyses performed by the author, the median difference was not statistically significant

11 Table 19: Clinical evidence profile for self-management interventions: Health Active Behavioural intervention in SCI (HABITS)

12 programme versus single information meeting

Quality assessment	No of patients	Effect	Quality	Importance	
				· · · · · · · · · · · · · · · · · · ·	

No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	HABITS	Information meeting	Relative (95% Cl)	Absolute		
Overall qu	Overall quality of life (WHOQoL-5; scale not reported; better indicated by higher values) - at 16 weeks (following baseline)											
1 (Kooijma ns 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	21	21	-	MD 0.5 lower (2.26 lower to 1.26 higher)	VERY LOW	CRITICAL
Overall qu	uality of life (W	HOQoL-5; s	cale not reported;	better indicated k	y higher value	s) - at 42 w	veeks (follow	ing baseline)				
1 (Kooijma ns 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	17	14	-	MD 1.1 higher (1.05 lower to 3.25 higher)	VERY LOW	CRITICAL
Overall qu	Overall quality of life (MHI-5; scale not reported; better indicated by higher values) - at 16 weeks (following baseline)											
1 (Kooijma ns 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	21	21	-	MD 2.8 higher (3.97 lower to 9.57 higher)	VERY LOW	CRITICAL
Overall qu	uality of life (MI	HI-5; scale r	ot reported; better	indicated by hig	her values) - at	42 weeks	(following ba	seline)				
1 (Kooijma ns 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	17	14	-	MD 0.7 higher (7.62 lower to 9.02 higher)	VERY LOW	CRITICAL
Changes	in activity of da	aily living (S	CIM3; range 0-100;	better indicated	by higher valu	es) - at 16	weeks (follov	ving baseline) (Better indic	ated by higher	values)	
1 (Kooijma ns 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	25	25	-	MD 1.9 higher (6.75 lower to 10.55 higher)	VERY LOW	IMPORTANT
Changes	in activity of da	aily living (S	CIM3; range 0-100;	better indicated	by higher valu	es) - at 42	weeks (follov	ving baseline) (Better indic	ated by higher	values)	
1 (Kooijma ns 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	23	20	-	MD 0.8 higher (8.71 lower to 10.31 higher)	VERY LOW	IMPORTANT

CI: confidence interval; MD: mean difference; MHI-5: 5 item Mental health inventory; SCIM3: Spinal cord independence measure III: WHOQoL-5: 5 item World Health

2 Organization quality of life

1

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

2 95% CI crosses 1 MID (for WHOQoL-5 +/-2.05; for MHI-5 +/-7.5 to 7.5, for SCIM3 +/-7.5) 3 95% CI crosses 2 MIDs (for MHI-5 +/-7.5 to 7.5, for SCIM3 +/-7.5)

3 4 5

1 Table 20: Clinical evidence profile for self-management interventions: multimedia self-care education and information versus self-care 2 information

			Quality assessn	nent			No of patients E			Effect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Multimedia self-care education and information	Self-care information	Relative (95% Cl)	Absolute	Quality	Importance
Overall qu	uality of life (Bri	ief burn spe	ecific health scale;	range 0-40; bette	r indicated by I	nigher value	s) [3 months (aft	er intervention	completion)]			
1 (Mohadd es Ardebili 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	50	50	-	MD 1.13 higher (0.85 to 1.41 higher)	LOW	CRITICAL

3 *CI: confidence interval; MD: mean difference*

4 1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

5 Table 21: Clinical evidence table for person-centred goal setting: motivational interviewing versus standard care

			Quality assessme	ent			No of pat	tients	l	Effect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Motivational interviewing	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Overall qu	ality of life: Ge	neral healt	h score (SF-36; sca	le not reported;	better indicated	l by highe	r values) [at discl	harge (2 mon	ths after ba	seline)]		
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	20	19	-	MD 0.46 lower (13.46 lower to 12.54 higher)	VERY LOW	CRITICAL
Overall qu	ality of life: Ge	eneral healt	h score (SF-36; sca	le not reported; l	better indicated	l by highe	r values) [at 6 mo	onths after dis	scharge]			
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	15	16	-	MD 1.15 higher (13.17 lower to 15.47 higher)	VERY LOW	CRITICAL

DRAFT FOR CONSULTATION Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

			Quality assessm	ent			No of par	tients		Effect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Motivational interviewing	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Overall qu	uality of life: Ge	eneral healt	h score (SF-36; sca	ale not reported;	better indicated	l by highe	r values) [at 12 m	onths after d	ischarge]			
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	11	11	-	MD 1 lower (20.92 lower to 18.92 higher)	VERY LOW	CRITICAL
Overall qu	uality of life: Ph	ysical com	ponent score (SF-1	2; scale not repo	rted; better ind	licated by	higher values) [a	t 6 months]				
1 (Wiechm an 2015)	randomised trials	serious ³	no serious inconsistency	no serious indirectness	no serious imprecision	none	40	41	-	MD 4.7 higher (0.29 lower to 9.11 higher)	MODERA TE	CRITICAL
Overall qu	uality of life: Ph	ysical com	ponent score (SF-1	2; scale not repo	rted; better ind	licated by	higher values) [a	t 12 months]				
1 (Wiechm an 2015)	randomised trials	serious ³	no serious inconsistency	no serious indirectness	serious ⁴	none	40	41	-	MD 3.6 lower (9.54 lower to 2.34 higher)	LOW	CRITICAL
Overall qu	uality of life: Me	ental health	score (SF-36; scal	e not reported; b	etter indicated	by higher	values) [at discha	arge (2 month	ns after bas	eline)]		
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	20	19	-	MD 6 higher (6 lower to 18 higher)	VERY LOW	CRITICAL
Overall qu	uality of life: Me	ental health	score (SF-36; scal	e not reported; b	etter indicated	by higher	values) [at 6 mon	ths after disc	harge]			
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	15	16	-	MD 10.37 higher (5.2 lower to 25.94 higher)	VERY LOW	CRITICAL
Overall qu	uality of life: Me	ental health	score (SF-36; scal	e not reported; b	etter indicated	by higher	values) [at 12 mo	onths after dis	scharge]			
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	11	11	-	MD 4.65 higher (12.08 lower to 21.38 higher)	VERY LOW	CRITICAL
Overall qu	uality of life: Me	ental compo	onent score (SF-12	; scale not report	ed; better indic	ated by hi	gher values) [at 6	6 month				
1 (Wiechm	randomised trials	serious ³	no serious inconsistency	no serious indirectness	serious ⁴	none	40	41	-	MD 1.9 higher (2.52 lower to	LOW	CRITICAL

DRAFT FOR CONSULTATION Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

			No of pat	tients	1	Effect						
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Motivational interviewing	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
1 (Wiechm an 2015)	randomised trials	serious ³	no serious inconsistency	no serious indirectness	serious ⁴	none	40	41	-	MD 7.1 higher (2.32 to 11.88 higher)	LOW	CRITICAL
Overall qu	ality of life: Pa	rticipation	(IMPACT-S; scale r	not reported; bett	er indicated by	higher va	lues) [at discharg	ge (2 months	after baseli	ne)]		
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	20	19	-	MD 8.92 lower (17.38 to 0.46 lower)	VERY LOW	CRITICAL
Overall qu	uality of life: Pa	rticipation	(IMPACT-S; scale r	ot reported; bett	er indicated by	higher va	lues) [at 6 month	s after discha	arge]			
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	15	16	-	MD 0.96 lower (10.53 lower to 8.61 higher)	VERY LOW	CRITICAL
Overall qu	uality of life: Pa	rticipation	(IMPACT-S; scale r	ot reported; bett	er indicated by	higher va	lues) [at 12 mont	hs after disch	arge]			
1 (Nooijen 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	11	11	-	MD 4.77 higher (7.04 lower to 16.58 higher)	VERY LOW	CRITICAL
Patient Sa	atisfaction: Sat	isfaction wi	th Social Support (scale not reporte	d; better indica	ted by hic	her values) [at 6	months]				
1 (Wiechm an 2015)	randomised trials	serious ³	no serious inconsistency	no serious indirectness	serious ⁴	none	40	41	-	MD 0.5 higher (0.31 lower to 1.31 higher)	LOW	CRITICAL
Patient Sa	atisfaction: Sat	isfaction wi	th Social Support (scale not reporte	d; better indica	ted by hig	her values) [at 12	2 months]				
1 (Wiechm an 2015)	randomised trials	serious ³	no serious inconsistency	no serious indirectness	serious ⁴	none	40	41	-	MD 1.5 higher (0.5 to 2.5 higher)	LOW	CRITICAL
Changes i	in mood: Depre	ession (CES	S-D; range 0-30; bet	tter indicated by	lower values) [a	t dischar	ge (2 months afte	r baseline)]				
1 (Nooijen 2016b)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	20	19	-	MD 2.94 higher (2.63 lower to 8.51 higher)	VERY LOW	CRITICAL
Changes i	in mood: Depre	ession (CES	S-D; range 0-30; bet	tter indicated by	lower values) [a	at 6 month	s after discharge]				
1	randomised	verv	no serious	no serious	very	none	15	- 16		MD 0.69	VERY	CRITICAL

DRAFT FOR CONSULTATION Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	Quality assessment							tients		Effect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Motivational interviewing	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
(Nooijen 2016b)	trials	serious ¹	inconsistency	indirectness	serious ²					lower (9.38 lower to 8 higher)	LOW	
Changes	in mood: Depre	ession (CES	S-D; range 0-30; bet	tter indicated by	lower values) [a	at 12 mont	hs after discharg	le]				
1 (Nooijen 2016b)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	11	11	-	MD 1.39 lower (10.19 lower to 7.41 higher)	VERY LOW	CRITICAL
Changes	in activity of da	aily living (n	nin/day wheeled ph	ysical activity; b	etter indicated	by higher	values) [at disch	arge (2 month	ns after bas	eline)]		
1 (Nooijen 2016a)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	16	14	-	MD 11 higher (1.96 lower to 23.96 higher)	VERY LOW	IMPORTANT
Changes	in activity of da	aily living (V	Vheeled physical a	ctivity min/day; b	etter indicated	by higher	values) [at 6 mor	nths]				
1 (Nooijen 2016a)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	13	14	-	MD 28 higher (4.99 to 51.01 higher)	VERY LOW	IMPORTANT
Changes	in activity of da	aily living (V	Vheeled physical a	ctivity min/day; b	etter indicated	by higher	values) [at 12 mo	onths]				
1 (Nooijen 2016a)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	10	10	-	MD 23 higher (11.63 lower to 57.63 higher)	VERY LOW	IMPORTANT
Changes	in activity of da	aily living (F	Physical Activity Sc	ale for Individual	s with Physica	Disabiliti	es; scale not rep	orted; better i	ndicated by	/ higher values)	[at 6 months]	
1 (Nooijen 2016a)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	20	19	-	MD 22 higher (6.67 to 37.33 higher)	LOW	IMPORTANT
Changes	in activity of da	aily living (F	hysical Activity Sc	ale for Individual	s with Physica	Disabiliti	es; scale not rep	orted; better i	ndicated by	/ higher values)	at 12 months	5]
1 (Nooijen 2016a)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	20	19	-	MD 15 higher (7.76 to 22.24 higher)	LOW	IMPORTANT
Changes	in activity of da	aily living (C	SAS; scale not repo	orted; better indic	ated by higher	values) [a	t 6 months]					
1 (Wiechm an 2015)	randomised trials	serious ³	no serious inconsistency	no serious indirectness	serious ⁴	none	40	41	-	MD 2.6 lower (8.77 lower to 3.57 higher)	LOW	IMPORTANT

			Quality assessme	ent			No of pa	tients	1	Effect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Motivational interviewing	Standard care	Relative (95% Cl)	Absolute	Quality	Importance
Changes i	in activity of da	aily living (G	GAS; scale not repo	orted; better indic	ated by higher	values) [a	t 12 months]					
1 (Wiechm an 2015)	randomised trials	serious ³	no serious inconsistency	no serious indirectness	no serious imprecision	none	40	41	-	MD 1.1 higher (4.96 lower to 7.16 higher)	MODERA TE	IMPORTANT
Pain: Pair	n intensity (Chr	onic Pain G	Grade; scale not rep	orted; better ind	icated by lower	values) [a	at discharge (2 m	onths after b	aseline)]			
1 (Nooijen 2016b)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	20	19	-	MD 2.96 higher (14.75 lower to 20.67 higher)	VERY LOW	IMPORTANT
Pain: Pair	n intensity (Chr	onic Pain G	Grade; scale not rep	orted; better ind	icated by lower	values) [a	at 6 months after	discharge]				_
1 (Nooijen 2016b)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	15	16	-	MD 1.23 higher (18.05 lower to 20.51 higher)	VERY LOW	IMPORTANT
Pain: Pain	n intensity (Chr	onic Pain G	Grade; scale not rep	orted; better ind	icated by lower	values) [a	at 12 months afte	r discharge]				
1 (Nooijen 2016b)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	11	11	-	MD 3.91 lower (28.52 lower to 20.7 higher)	VERY LOW	IMPORTANT
Pain: Pain	n disability (Ch	ronic Pain (Grade; scale not re	ported; better ind	licated by lowe	r values) [at 6 months after	discharge]				
1 (Nooijen 2016b)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ²	none	15	16	-	MD 0.06 lower (1.16 lower to 1.04 higher)	VERY LOW	IMPORTANT
Pain: Pain	n disability (Ch	ronic Pain (Grade; scale not re	ported; better ind	licated by lowe	r values) [at 12 months afte	er discharge]				
1 (Nooijen 2016b)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ⁴	none	11	11	-	MD 1.15 higher (0.13 to 2.17 higher)	VERY LOW	IMPORTANT

CES-D: Center for Epidemiologic Studies Depression Scale; CI: confidence interval; GAS: Goal attainment scaling; IMPACT-S: ICF-Measure of Participation and Activities

2 3 Screener; MD: mean difference; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

2 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2 4

1

- 1 3 95% CI crosses 2 MIDs (for SF-36 General Health +/-11.83; for IMPACT-S Participation +/-8.54; for CES-D +/-4.585; for SF-36 Mental health +/-9.63; for pain intensity +/-
- 2 10.92, for pain disability +/-0.83)

care

- 3 4 95% CI crosses 1 MID (for SF-12 physical component score +/-5.95; for IMPACT-S Participation +/-8.54; for Satisfaction with Social Support +/-1.05;, for CES-D +/-4.585; ;
- 4 for SF-26 mental health score +/-9.63; for SF-12 mental component score +/-5.75; for wheeled physical activity +/-17.5 to 17.5; for Goal Attainment Score +/-7.4; for Pain
- 5 disability +/-0.83)

6 Table 22: Clinical evidence table for person-centred goal setting: supported discharge with motivational interviewing versus standard

7

	ouro											
			Quality assessme	ent			No of pati	E	ffect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Supported discharge with motivational interviewing	Standard care and rehabilitat ion	Relative (95% Cl)	Absolute	Quality	Importance
Changes	in activity of da	ily living (li	nstrumental Activit	ies of Daily Living	g; range 0-56; t	better india	cated by higher val	ues) [at 1 mo	nth follow-	up]		
1 (Zidén 2008)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	48	54	-	MD 18.7 higher (13.5 to 23.9 higher)	MODERATE	IMPORTANT

8 *CI: confidence interval; MD: mean difference*

9 1 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2

10 GRADE tables for review question: B.3b What psychological and psychosocial rehabilitation interventions are effective and 11 acceptable for children and young people with complex rehabilitation needs after traumatic injury?

12 **Table 23: Clinical evidence profile for Microskin™ camouflage versus wait-list control**

			Quality ass	essment			No of pa	itients	Eff	fect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Microskin™ camouflage	Wait-list control	Relative (95% CI)	Absolute	Quality	Importance
Overall qu	ality of life: F	edsQL 4.0	(scale not reported	d; better indicated	d by higher valu	ues) [at 8 weeks fol	low-up from ba	seline]				
1 (Maskell 2014)	randomise d trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	24	17	-	MD 3.64 higher (4.61 lower to 11.89	VERY LOW	CRITICAL

			Quality asso	essment			No of pa	tients	Eff	ect		
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Microskin™ camouflage	Wait-list control	Relative (95% CI)	Absolute	Quality	Importance
										higher)		

CI: confidence interval; MD: Mean difference; PEDsQL 4.0: Pediatric quality of life inventory version 4.0; TM: Trademark

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2 2 95% CI crosses 1 MID (for PedsQL 4.0 +/- 7.83)

. 2 3

1

Appendix G – Economic evidence study selection

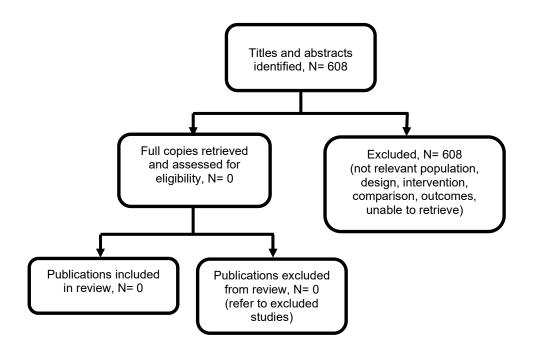
- 2 Economic study selection for review questions:
- 3 B.3a What psychological and psychosocial rehabilitation interventions are
- effective and acceptable for adults with complex rehabilitation needs after
 traumatic injury?

6 B.3b What psychological and psychosocial rehabilitation interventions are

- 7 effective and acceptable for children and young people with complex
- 8 rehabilitation needs after traumatic injury?)
- 9 A combined search was conducted for both review questions.

10 Figure 3: Study selection flow chart: Adults

11



12

13

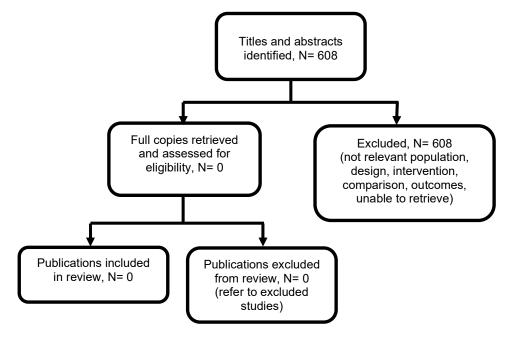
14

15

16

DRAFT FOR CONSULTATION Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

1 Figure 4: Study selection flow chart: Children and young people



2 3

1 Appendix H – Economic evidence tables

2 Economic evidence tables for review question: B.3a What psychological and

- psychosocial rehabilitation interventions are effective and acceptable for adults
 with complex rehabilitation needs after traumatic injury?
- 5 No economic studies were identified which were applicable to this review question.

6 Economic evidence tables for review question: B.3b What psychological and

- 7 psychosocial rehabilitation interventions are effective and acceptable for children
- 8 and young people with complex rehabilitation needs after traumatic injury?
- 9 No economic studies were identified which were applicable to this review question.

10

11

1

2 Appendix I – Economic evidence profiles

3 Economic evidence profiles for review question: B.3a What psychological and

- 4 psychosocial rehabilitation interventions are effective and acceptable for adults
 5 with complex rehabilitation needs after traumatic injury?
- 6 No economic studies were identified which were applicable to this review question.

7 Economic evidence profiles for review question: B.3b What psychological and

8 psychosocial rehabilitation interventions are effective and acceptable for children

- 9 and young people with complex rehabilitation needs after traumatic injury?
- 10 No economic studies were identified which were applicable to this review question.

11

1 Appendix J – Economic analysis

- 2 Economic evidence analysis for review question: B.3a What psychological and
- 3 psychosocial rehabilitation interventions are effective and acceptable for
- 4 adults with complex rehabilitation needs after traumatic injury?
- 5 No economic analysis was conducted for this review question.
- 6 Economic evidence analysis for review question: B.3b What psychological and
- 7 psychosocial rehabilitation interventions are effective and acceptable for
- 8 children and young people with complex rehabilitation needs after traumatic
- 9 injury?
- 10 No economic analysis was conducted for this review question.

11

1 Appendix K – Excluded studies

- 2 Excluded clinical and economic studies for review question: B.3a What
- 3 psychological and psychosocial rehabilitation interventions are effective and
- 4 acceptable for adults with complex rehabilitation needs after traumatic injury?

5 Clinical studies

6 Table 24: Excluded studies and reasons for their exclusion

Study	Reason for Exclusion
Abou-Setta, A. M., Beaupre, L. A., Rashiq, S., Dryden, D. M., Hamm, M. P., Sadowski, C. A., Menon, M. R. G., Majumdar, S. R., Wilson, D. M., Karkhaneh, M., Mousavi, S. S., Wong, K., Tjosvold, L., Jones, C. A., Comparative effectiveness of pain management interventions for hip fracture: A systematic review, Annals of Internal Medicine, 155, 234-245, 2011	Systematic review included studies checked for relevance. None were found.
Arbour-Nicitopoulos, K. P., Ginis, K. A., Latimer, A. E., Planning, leisure-time physical activity, and coping self-efficacy in persons with spinal cord injury: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 90, 2003-2011, 2009	Outcomes not in PICO - intentions and self- efficacy
Arefnasab, Z., Babamahmoodi, A., Babamahmoodi, F., Noorbala, A. A., Alipour, A., Panahi, Y., Shams, J., Rad, F. R., Khaze, V., Ghanei, M., Mindfulness-based Stress Reduction (MBSfR) and its effects on psychoimmunological factors of chemically pulmonary injured veterans, Iranian Journal of Allergy, Asthma and Immunology, 15, 476-486, 2016	Population not in PICO - veterans exposed to mustard gas and complications of Iran-Iraq war.
Arefnasab, Zahra, Babamahmoodi, Abdolreza, Babamahmoodi, Farhang, Noorbala, Ahmad Ali, Alipour, Ahmad, Panahi, Yunes, Shams, Jamal, Riazi Rad, Farhad, Khaze, Vahid, Ghanei, Mostafa, Mindfulness-based Stress Reduction (MBSR) and Its Effects on Psychoimmunological Factors of Chemically Pulmonary Injured Veterans, Iranian journal of allergy, asthma, and immunology, 15, 476-486, 2016	Population not in PICO - veterans exposed to mustard gas and complications of Iran-Iraq war.
Arrieta, H., Rezola-Pardo, C., Gil, S. M., Virgala, J., Iturburu, M., Anton, I., Gonzalez-Templado, V., Irazusta, J., Rodriguez-Larrad, A., Effects of Multicomponent Exercise on Frailty in Long- Term Nursing Homes: A Randomized Controlled Trial, Journal of the American Geriatrics Society, 67, 1145-1151, 2019	Population not in PICO: Residents at a longterm nursing home
Baker, Virginia B., Eliasen, Kathryn M., Hack, Nawaz K., Lifestyle modifications as therapy for medication refractory post-traumatic headache (PTHA) in the military population of Okinawa,	Non-comparative study
The journal of headache and pain, 19, 113, 2018	

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Ctudy.	Reason for Exclusion
Study enhanced safety and self-care, Care	
Management Journals, 1, 47-54, 1999	
Baron, J. S., Sullivan, K. J., Swaine, J. M., Aspinall, A., Jaglal, S., Presseau, J., White, B., Wolfe, D., Grimshaw, J. M., Self-management interventions for skin care in people with a spinal cord injury: part 1-a systematic review of intervention content and effectiveness, Spinal Cord, 56, 823-836, 2018	Systematic review - studies checked for possible inclusion. 8 were identified.
Basilici Zannetti, Emanuela, D'Agostino, Fabio, Cittadini, Noemi, Feola, Maurizio, Pennini, Annalisa, Rao, Cecilia, Vellone, Ercole, Tarantino, Umberto, Alvaro, Rosaria, Effect of tailored educational intervention to improve self- care maintenance and quality of life in postmenopausal osteoporotic women after a fragility fracture: the Guardian Angel® study, Igiene e sanita pubblica, 73, 65-76, 2017	Full text in Italian
Berube, M., Gelinas, C., Feeley, N., Martorella, G., Cote, J., Laflamme, G. Y., Rouleau, D. M., Choiniere, M., Feasibility of a Hybrid Web-Based and In-Person Self-management Intervention Aimed at Preventing Acute to Chronic Pain Transition After Major Lower Extremity Trauma (iPACT-E-Trauma): A Pilot Randomized Controlled Trial, Pain medicine (Malden, Mass.), 2019	Intervention not in PICO - specific pain management interventions
Berube, M., Gelinas, C., Martorella, G., Feeley, N., Cote, J., Laflamme, G. Y., Rouleau, D. M., Choiniere, M., Development and Acceptability Assessment of a Self-Management Intervention to Prevent Acute to Chronic Pain Transition after Major Lower Extremity Trauma, Pain management nursing : official journal of the American Society of Pain Management Nurses, 19, 671-692, 2018	Non-randomised study, n<100 per treatment arm.
Berube, Melanie, Gelinas, Celine, Feeley, Nancy, Martorella, Geraldine, Cote, Jose, Laflamme, G. Yves, Rouleau, Dominique M., Choiniere, Manon, A Hybrid Web-Based and In- Person Self-Management Intervention Aimed at Preventing Acute to Chronic Pain Transition After Major Lower Extremity Trauma: Feasibility and Acceptability of iPACT-E-Trauma, JMIR formative research, 2, e10323, 2018	Intervention not in PICO - specific pain management interventions
Best, K. L., Miller, W. C., Huston, G., Routhier, F., Eng, J. J., Pilot Study of a Peer-Led Wheelchair Training Program to Improve Self- Efficacy Using a Manual Wheelchair: A Randomized Controlled Trial, Arch Phys Med Rehabil, 97, 37-44, 2016	Population not in PICO - wheelchair users only.
Black, O., Keegel, T., Sim, M. R., Collie, A., Smith, P., The Effect of Self-Efficacy on Return- to-Work Outcomes for Workers with Psychological or Upper-Body Musculoskeletal Injuries: A Review of the Literature, Journal of Occupational Rehabilitation, 28, 16-27, 2018	Systematic review, included studies checked for relevance

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Black, O., Keegel, T., Sim, M., Collie, A., Smith, P., The effect of self-efficacy on return-to-work outcomes for workers with psychological or upper-body musculoskeletal injuries: A review of the literature, Occupational and Environmental Medicine, 73, A207, 2016	Duplicate paper
Block, P., Vanner, E. A., Keys, C. B., Rimmer, J. H., Skeels, S. E., Project Shake-It-Up: using health promotion, capacity building and a disability studies framework to increase self efficacy, Disability and Rehabilitation, 32, 741- 754, 2010	Non-randomised study, n<100 per treatment arm.
Bombardier, C., Fann, J. R., Ehde, D., Reyes, M. R., Hoffman, J. M., Collaborative care for pain, depression and physical inactivity in an outpatient SCI clinic: The sci-care study, Archives of Physical Medicine and Rehabilitation, 97, e78-e79, 2016	Conference abstract
Brunelli, S., Morone, G., Iosa, M., Ciotti, C., De Giorgi, R., Foti, C., Traballesi, M., Efficacy of progressive muscle relaxation, mental imagery, and phantom exercise training on phantom limb: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 96, 181- 187, 2015	Population not in PICO - 28/40 had amputation for dysvascular causes.
Burns, A., Banerjee, S., Morris, J., Woodward, Y., Baldwin, R., Proctor, R., Tarrier, N., Pendleton, N., Sutherland, D., Andrew, G., Horan, M., Treatment and prevention of depression after surgery for hip fracture in older people: randomized, controlled trials, J Am Geriatr Soc, 55, 75-80, 2007	Intervention not in PICO - treatment and prevention of depression in hip fracture patients.
Carrougher, G. J., Brych, S. B., Pham, T. N., Mandell, S. P., Gibran, N. S., An Intervention Bundle to Facilitate Return to Work for Burn- Injured Workers: Report from a Burn Model System Investigation, Journal of Burn Care and Research, 38, e70-e78, 2017	Intervention not in PICO: Return to work interventions (covered by NICE guideline on return to work)
Chertok, N. V., Dolgova, V. I., Mamylina, N. V., Bajguzhin, P. A., Kryzhanovskaya, N. V., The effect of rehabilitation technology on quality of life of middle-age women afterupper limb trauma, International Journal of Pharmacy and Technology, 8, 27186-27195, 2016	Intervention not in PICO - rehabilitation course
Chin, O. Y., Tollefson, T. T., Role of Camouflage in Management of Facial Trauma Deformities, Facial plastic surgery : FPS, 33, 643-652, 2017	Narrative review with case reports
Cogan, L., Mc Gurk, S., Cannon, J., Romero- Ortuno, R., Frawley, N., The activity and outcomes of an off-site geriatric rehabilitation unit: A 1-year study, Irish Journal of Medical Science, 182, S243, 2013	Conference abstract
Craig, A. R., Hancock, K., Dickson, H., Chang, E., Long-term psychological outcomes in spinal cord injured persons: results of a controlled trial using cognitive behavior therapy, Archives of Physical Medicine and Rehabilitation, 78, 33-8,	Non-randomised study, n<100 per treatment arm.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study 1997	Reason for Exclusion
Crotty, M., Unroe, K., Cameron, I. D., Miller, M., Ramirez, G., Couzner, L., Rehabilitation interventions for improving physical and psychosocial functioning after hip fracture in older people, Cochrane Database of Systematic Reviews, 2010	Systematic review. References checked for possible studies - 5 were identified.
Curtis, K., Hitzig, S. L., Bechsgaard, G., Stoliker, C., Alton, C., Saunders, N., Leong, N., Katz, J., Evaluation of a specialized yoga program for persons with a spinal cord injury: A pilot randomized controlled trial, Journal of Pain Research, 10, 999-1017, 2017	Intervention not in PICO - physical yoga programme
Daneshpajooh, L., Najafi Ghezeljeh, T., Haghani, H., Comparison of the effects of inhalation aromatherapy using Damask Rose aroma and the Benson relaxation technique in burn patients: A randomized clinical trial, Burns, 45, 1205-1214, 2019	Outcome not in PICO - pain anxiety
De Silva, Mary, Maclachlan, Malcolm, Devane, Declan, Desmond, Deirdre, Gallagher, Pamela, Schnyder, Ulrich, Brennan, Muireann, Patel, Vikram, Psychosocial interventions for the prevention of disability following traumatic physical injury, The Cochrane database of systematic reviews, CD006422, 2009	Systematic review, included studies checked for relevance and added to review individually when relevant
Dennis, B. M., Nolan, T. L., Brown, C. E., Vogel, R. L., Flowers, K. A., Ashley, D. W., Nakayama, D. K., Using a checklist to improve family communication in trauma care, American Surgeon, 82, 59-64, 2016	Paper unavailable.
Dorsey, L., Spinal cord injury interdisciplinary education, Journal for specialists in pediatric nursing : JSPN, 10, 86-89, 2005	Narrative review
Dorstyn, D., Mathias, J., Denson, L., Efficacy of cognitive behavior therapy for the management of psychological outcomes following spinal cord injury: a meta-analysis, Journal of health psychology, 16, 374-391, 2011	Systematic review. References checked for possible studies - 1 was identified.
Dorstyn, D., Roberts, R., Murphy, G., Craig, A., Kneebone, I., Stewart, P., Chur-Hansen, A., Marshall, R., Clark, J., Migliorini, C., Work and SCI: a pilot randomized controlled study of an online resource for job-seekers with spinal cord dysfunction, Spinal Cord, 57, 221â 228, 2019	Intervention not in PICO - online resource targeted to job seekers with spinal cord injury or disorder
Duchnick, J. J., Letsch, E. A., Curtiss, G., Coping effectiveness training during acute rehabilitation of spinal cord injury/dysfunction: a randomized clinical trial, Rehabil Psychol, 54, 123-32, 2009	Comparison not in PICO - coping effectiveness training versus supportive group therapy. Historical non-randomised study used for secondary analysis, N >100 per arm.
Dyck, D. G., Weeks, D. L., Gross, S., Lederhos Smith, C., Lott, H. A., Wallace, A. J., Wood, S. M., Comparison of two psycho-educational family group interventions for improving psycho- social outcomes in persons with spinal cord injury and their caregivers: a randomized- controlled trial of multi-family group intervention	Study protocol

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
versus an active education control condition,	
BMC psychology, 4, 40, 2016	
Elbers, N. A., Akkermans, A. J., Cuijpers, P., Bruinvels, D. J., Empowerment of personal injury victims through the internet: design of a randomized controlled trial, Trials, 12, 29, 2011	Study protocol
Elbers, N. A., Akkermans, A. J., Cuijpers, P., Bruinvels, D. J., Effectiveness of a web-based intervention for injured claimants: a randomized controlled trial, Trials, 14, 227, 2013	Population not in PICO - 42% were hospitalised (after traffic accident).
Ferguson, S. L., Voll, K. V., Burn Pain and Anxiety: The Use of Music Relaxation during Rehabilitation, Journal of Burn Care and Rehabilitation, 25, 8-14, 2004	Outcome not in PICO - change in pain and anxiety during relaxation intervention
Finn, Sacha B., Perry, Briana N., Clasing, Jay E., Walters, Lisa S., Jarzombek, Sandra L., Curran, Sean, Rouhanian, Minoo, Keszler, Mary S., Hussey-Andersen, Lindsay K., Weeks, Sharon R., Pasquina, Paul F., Tsao, Jack W., A Randomized, Controlled Trial of Mirror Therapy for Upper Extremity Phantom Limb Pain in Male Amputees, Frontiers in neurology, 8, 267, 2017	Intervention not in PICO – mirror therapy
Flinn, N., Storm, K., Lower-extremity dressing for persons with quadriplegia: What are the long- term outcomes?, Archives of Physical Medicine and Rehabilitation, 91, e28, 2010	Conference abstract
Fonte, N., Urological care of the spinal cord- injured patient, Journal of wound, ostomy, and continence nursing : official publication of The Wound, Ostomy and Continence Nurses Society / WOCN, 35, 2008	Narrative review
Forchheimer, Martin, Tate, Denise G., Enhancing community re-integration following spinal cord injury, NeuroRehabilitation, 19, 103- 13, 2004	Non-randomised study, n<100 per treatment arm.
Foy, T., Perritt, G., Thimmaiah, D., Heisler, L., Offutt, J. L., Cantoni, K., Hseih, C. H., Gassaway, J., Ozelie, R., Backus, D., Occupational therapy treatment time during inpatient spinal cord injury rehabilitation, Journal of Spinal Cord Medicine, 34, 162-175, 2011	Comparison not in PICO - different levels of SCI injury
Foy, Teresa, Perritt, Ginger, Thimmaiah, Deepa, Heisler, Lauren, Offutt, Jennifer Lookingbill, Cantoni, Kara, Hseih, Ching-Hui, Gassaway, Julie, Ozelie, Rebecca, Backus, Deborah, The SCIRehab project: treatment time spent in SCI rehabilitation. Occupational therapy treatment time during inpatient spinal cord injury rehabilitation, The journal of spinal cord medicine, 34, 162-75, 2011	Comparison not in PICO - different levels of SCI injury
Frenkel, L., A support group for parents of burned children: A South African Children's Hospital Burns Unit, Burns, 34, 565-569, 2008	Qualitative study
Frisbee, Kathleen L., Variations in the Use of mHealth Tools: The VA Mobile Health Study, JMIR mHealth and uHealth, 4, e89, 2016	Population not in PICO - mixture of mental and physical trauma with no way of differentiating in analysis

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Frosch, E., Lewandowski, L., Psychological issues associated with acute physical injury: After the pediatric emergency department, International Review of Psychiatry, 10, 216-223, 1998	Narrative review
Galea, M. P., Levinger, P., Lythgo, N., Cimoli, C., Weller, R., Tully, E., McMeeken, J., Westh, R., A targeted home- and center-based exercise program for people after total hip replacement: a randomized clinical trial, Archives of Physical Medicine and Rehabilitation, 89, 1442â 1447, 2008	Intervention not in PICO - physical exercise intervention
Gargaro, J., Warren, C., Boschen, K., Perceived barriers and facilitators to community reintegration after spinal cord injury: A critical review of the literature, Critical Reviews in Physical and Rehabilitation Medicine, 25, 101- 141, 2013	Narrative review
Gassaway, J., Anziano, P., Peer-supported self- directed care optimizes successful community transition after catastrophic injury, Journal of Spinal Cord Medicine, 39, 562, 2016	Conference abstract
Gassaway, J., Jones, M. L., Sweatman, W. M., Young, T., Peer-led, transformative learning approaches increase classroom engagement in care self-management classes during inpatient rehabilitation of individuals with spinal cord injury, Journal of Spinal Cord Medicine, 42, 338- 346, 2019	Non-randomised study, n<100 per treatment arm.
Gassner, K., Einsiedel, T., Linke, M., Görlich, P., Mayer, J., Does mental training improve learning to walk with an above-knee prosthesis?, Der Orthopade, 36, 673â 678, 2007	German language paper
Gernigon, C., Pereira Dias, C., Riou, F., Briki, W., Ninot, G., Reference system of competence and engagement in adapted physical activities of people with recent spinal cord injury, Disability and Rehabilitation, 37, 2192-2196, 2015	Non-randomised study, n<100 per treatment arm.
Ghazi, C., Nyland, J., Whaley, R., Rogers, T., Wera, J., Henzman, C., Social cognitive or learning theory use to improve self-efficacy in musculoskeletal rehabilitation: A systematic review and meta-analysis, Physiotherapy Theory and Practice, 34, 495-504, 2018	Systematic review - studies check for possible inclusions. None were identified.
Gill, M., Psychosocial implications of spinal cord injury, Critical care nursing quarterly, 22, 1-7, 1999	Narrative reveiw
Giummarra, M. J., Lennox, A., Dali, G., Costa, B., Gabbe, B. J., Early psychological interventions for posttraumatic stress, depression and anxiety after traumatic injury: A systematic review and meta-analysis, Clinical Psychology Review, 62, 11-36, 2018	Systematic review - studies checked for possible inclusion. None were identified.
Goodwin-Wilson, C., Watkins, M., Gardner- Elahi, C., Developing evidence-based process maps for spinal cord injury rehabilitation, Spinal Cord, 48, 122-127, 2010	No comparative data

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Otuntu	Desses for Evolution
Study	Reason for Exclusion
Goudie, S., Dixon, D., McMillan, G., Ring, D., McQueen, M., Is use of a psychological workbook associated with improved disabilities of the arm, shoulder and hand scores in patients with distal radius fracture?, Clinical Orthopaedics and Related Research, 476, 832- 845, 2018	Population not in PICO - isolated distal radial fracture, not complex rehabilitation needs
Griffin, Leah, Sifuentes, Mikaela M., Retrospective Payor Claims Analysis of Patients Receiving Outpatient Negative Pressure Wound Therapy With Remote Therapy Monitoring, Wounds : a compendium of clinical research and practice, 31, E9-E11, 2019	Paper unavailable.
Gual, N., Calle, A., Casino, J., Lusilla, P., Gual, A., Inzitari, M., Feasibility study of motivational interviewing to improve rehabilitation in an intermediate care hospital, European Geriatric Medicine, 6, S107, 2015	Conference abstract
Guest, R., Tran, Y., Gopinath, B., Cameron, I. D., Craig, A., Psychological distress following a motor vehicle crash: Preliminary results of a randomised controlled trial investigating brief psychological interventions, Trials, 19, 343, 2018	Population not included in PICO - exclusion criteria includes presence of severe injuries
Guihan, M., Holmes, S. A., Bombardier, C. H., Ehde, D. M., Rapacki, L. M., Self-management to prevent ulcers in spinal cord injury, Journal of Spinal Cord Medicine, 36, 520, 2013	Conference abstract
Gursky, Barbara, Kestler, Lisa P., Lewis, Michael, Psychosocial intervention on procedure-related distress in children being treated for laceration repair, Journal of developmental and behavioral pediatrics : JDBP, 31, 217-22, 2010	Non-randomised study, n<100 per treatment arm.
Haik, J., Tessone, A., Nota, A., Mendes, D., Raz, L., Goldan, O., Regev, E., Winkler, E., Mor, E., Orenstein, A., Hollombe, I., The use of video capture virtual reality in burn rehabilitation: The possibilities, Journal of Burn Care and Research, 27, 195-197, 2006	Narrative description of intervention development
Hall, A. B., Englert, Z., Hanseman, D., Klein, A., Self-efficacy improvement for performance of trauma-related skills due to a military-civilian partnership, American Surgeon, 84, E505-E507, 2018	Paper unavailable.
Handoll, H. H. G., Brorson, S., Interventions for treating proximal humeral fractures in adults, Cochrane Database of Systematic Reviews, 2015	Systematic review - studies checked for possible inclusion. None were identified.
Harris, S. R., Psychogenic movement disorders in children and adolescents: an update, European Journal of Pediatrics, 178, 581-585, 2019	Narrative review
Harvey, C., Dixon, M., Padberg, N., Support group for families of trauma patients: a unique approach, Critical care nurse, 15, 59-63, 1995	Narrative review

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Hashemi, Fatemeh, Rahimi Dolatabad,	Comparison not in PICO - no intervention rather
Fatemeh, Yektatalab, Shahrzad, Ayaz, Mehdi, Zare, Najaf, Mansouri, Parisa, Effect of Orem Self-Care Program on the Life Quality of Burn Patients Referred to Ghotb-al-Din-e-Shirazi Burn Center, Shiraz, Iran: A Randomized Controlled Trial, International journal of community based nursing and midwifery, 2, 40-50, 2014	than standard rehabilitation care.
Hearn, J. H., Finlay, K. A., Internet-delivered mindfulness for people with depression and chronic pain following spinal cord injury: a randomized, controlled feasibility trial, Spinal Cord, 56, 750-761, 2018	Population not in PICO - depression and chronic pain
Highsmith, M. Jason, Kahle, Jason T., Knight, Molly, Olk-Szost, Ayla, Boyd, Melinda, Miro, Rebecca M., Delivery of cosmetic covers to persons with transtibial and transfemoral amputations in an outpatient prosthetic practice, Prosthetics and Orthotics International, 40, 343- 9, 2016	No comparative data
Hill, Keith D., Hunter, Susan W., Batchelor, Frances A., Cavalheri, Vinicius, Burton, Elissa, Individualized home-based exercise programs for older people to reduce falls and improve physical performance: A systematic review and meta-analysis, Maturitas, 82, 72-84, 2015	Systematic review - studies checked for possible inclusion. None were identified.
Hocaloski, S., Elliott, S., Brotto, L., Breckon, E., McBride, K., A mindfulness psychoeducational group intervention targeting sexual adjustment for women with multiple sclerosis or spinal cord injury: A pilot study, Journal of Spinal Cord Medicine, 39, 583, 2016	Conference abstract
Holstege, M. S., Caljouw, M. A. A., Van Balen, R., Gussekloo, J., Achterberg, W. P., Effectiveness of innovations in geriatric rehabilitation. The SINGER Study, European Geriatric Medicine, 4, S109-S110, 2013	Conference abstract
Hossain, M. S., Harvey, L. A., Rahman, M. A., Muldoon, S., Bowden, J. L., Islam, M. S., Jan, S., Taylor, V., Cameron, I. D., Chhabra, H. S., Lindley, R. I., Biering-Sorensen, F., Li, Q., Dhakshinamurthy, M., Herbert, R. D., Community-based InterVentions to prevent serious Complications (CIVIC) following spinal cord injury in Bangladesh: protocol of a randomised controlled trial, BMJ Open, 6, e010350, 2016	Published protocol, recruitment still ongoing.
Houlihan, B. V., Brody, M., Everhart-Skeels, S., Pernigotti, D., Burnett, S., Zazula, J., Green, C., Hasiotis, S., Belliveau, T., Seetharama, S., Rosenblum, D., Jette, A., Randomized Trial of a Peer-Led, Telephone-Based Empowerment Intervention for Persons With Chronic Spinal Cord Injury Improves Health Self-Management, Archives of Physical Medicine and Rehabilitation, 98, 1067, 2017	Analyses and outcomes not in PICO - change in Patient Activation Measure. Quality of life and patient satisfaction reported only as difference in change scores between groups.
Houlihan, B. V., Jette, A., Friedman, R. H.,	Intervention not in PICO - telehealth intervention

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Paasche-Orlow, M., Ni, P., Wierbicky, J., Williams, K., Ducharme, S., Zazula, J., Cuevas, P., et al., A pilot study of a telehealth intervention for persons with spinal cord dysfunction, Spinal Cord, 51, 715â 720, 2013	targeted towards pressure ulcers, depression and healthcare utilisation.
 Houlihan, B., Brody, M., Everhart-Skeels, S., Pernigotti, D., Sam, J. Z., Hasiotis, B. S., Green, C., Seetharama, S., Belliveau, T., Rosenblum, D., Jette, A., "my care my call," a peer-led, telephone-based intervention for persons with spinal cord injury improves self-management behaviors, Archives of Physical Medicine and Rehabilitation, 97, e23, 2016 	Conference abstract
Houlihan, B., Brody, M., Plant, A., Skeels, S. E., Zazula, J., Pernigotti, D., Green, C., Hasiotis, S., Jette, A., Health care self-advocacy strategies for negotiating health care environments: Analysis of recommendations by satisfed consumers with SCI and SCI practitioners, Topics in Spinal Cord Injury Rehabilitation, 22, 13-26, 2016	Qualitative study
Houlihan, B., Brody, M., Skeels, S., Pernigotti, D., Zazula, J., Burnett, S., Green, C., Seetharama, S., Hasiotis, S., Belliveau, T., Rosenblum, D., Jette, A., RCT of peer-led phone-based empowerment intervention for persons with chronic spinal cord injury improves health self-management, Archives of Physical Medicine and Rehabilitation, 98, e152, 2017	Conference abstract
Huang, T. T., Liang, S. H., A randomized clinical trial of the effectiveness of a discharge planning intervention in hospitalized elders with hip fracture due to falling, J Clin Nurs, 14, 1193-201, 2005	Intervention not in PICO - discharge planning programme.
Hughes, R. B., Robinson-Whelen, S., Taylor, H. B., Hall, J. W., Stress self-management: an intervention for women with physical disabilities, Women's health issues, 16, 389-99, 2006	Population mixed between trauma and non- trauma with no way of determining
Huston, T., Hollicky, R., Chase, T., Cuthbert, J., Charlifue, S., Enhancing self-efficacy: The re- inventing yourself after SCI project, Journal of Spinal Cord Medicine, 36, 520-521, 2013	Conference abstract
Isaacson, B. M., Weeks, S. R., Pasquina, P. F., Webster, J. B., Beck, J. P., Bloebaum, R. D., The road to recovery and rehabilitation for injured service members with limb loss: a focus on Iraq and Afghanistan, U.S. Army Medical Department journal, 31-36, 2010	Paper unavailable.
Jayasinghe, N., Moallem, I., Wyka, K., Bruce, M., Difede, J. A., Addressing anxiety with exposure-based cognitive-behavioral therapy and relaxation training in older adults after medical falls, American Journal of Geriatric Psychiatry, 23, S152, 2015	Conference abstract
Jensen, M. P., Barber, J., Romano, J. M., Hanley, M. A., Raichle, K. A., Molton, I. R., Engel, J. M., Osborne, T. L., Stoelb, B. L.,	Specific pain management interventions

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

StudyReason for ExclusionCardenas, D. D., Patterson, D. R., Effects of self-hypnosis training and EMG biofeedback relaxation training on chronic pain in persons with spinal-cord injury, International Journal of Clinical and Experimental Hypnosis, 57, 239- 268, 2009Narrative reviewJohnson, K. A., Klaas, S. J., The changing nature of play: Implications for pediatric spinal cord injury, Journal of Spinal Cord Medicine, 30,Narrative review	
self-hypnosis training and EMG biofeedback relaxation training on chronic pain in persons with spinal-cord injury, International Journal of Clinical and Experimental Hypnosis, 57, 239- 268, 2009Narrative reviewJohnson, K. A., Klaas, S. J., The changing nature of play: Implications for pediatric spinal cord injury, Journal of Spinal Cord Medicine, 30,Narrative review	
nature of play: Implications for pediatric spinal cord injury, Journal of Spinal Cord Medicine, 30,	
S71-S75, 2007	
Johnson, S., Increase burn patient and family satisfaction with simple diagram, Journal of Burn Care and Research, 36, S229, 2015	
Jones, C., Perry, L., Bennett, B., Wickremasinghe, I. M., Addressing elevated blood pressures in spinal cord injury using mindfulness-based exercises, Journal of Spinal Cord Medicine, 37, 442-443, 2014	
Kamal, A. M., Fathy, H., Psychiatric assessment of disfigured burn patients following cognitive behavioral therapy program, Egyptian Journal of Neurology, Psychiatry and Neurosurgery, 50, 19-24, 2013	
Kane, F. M., Brodie, E. E., Coull, A., Coyne, L., Howd, A., Milne, A., Niven, C. C., Robbins, R., The analgesic effect of odour and music upon dressing change, British journal of nursing (Mark Allen Publishing), 13, S4â 12, 2004Specific pain management interventions	
Kellezi, B., Beckett, K., Earthy, S., Barnes, J., Sleney, J., Clarkson, J., Regel, S., Jones, T., Kendrick, D., Understanding and meeting information needs following unintentional injury: comparing the accounts of patients, carers and service providers, Injury, 46, 564-71, 2015	
Khanjari, Sedigheh, Tajik, Zahra, Haghani, Hamid, The effect of family-centered education on the quality of life of adolescents with spinal cord injuries, Journal of family medicine and primary care, 8, 711-716, 2019	
King, C., Kennedy, P., Coping effectiveness training for people with spinal cord injury: preliminary results of a controlled trial, The British journal of clinical psychology, 38 (Pt 1), 5-14, 1999Non-randomised study, n<100 per treatment arm.	
Kono, Taro, Groff, William Frederick, Sakurai, Hiroyuki, Yamaki, Takashi, Soejima, Kazukata, Nozaki, Motohiro, Treatment of traumatic scars using plasma skin regeneration (PSR) system, Lasers in Surgery and Medicine, 41, 128-30, 2009	
Konstantatos, A. H., Angliss, M., Costello, V., Cleland, H., Stafrace, S., Predicting the effectiveness of virtual reality relaxation on pain and anxiety when added to PCA morphine in patients having burns dressings changes, Burns, 35, 491-499, 2009	
Kooijmans, H., Post, M. W., van der Woude, L. Published protocol for included study	

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

needs after traumatic injury	
Study H., de Groot, S., Stam, H. J., Bussmann, J. B., Randomized controlled trial of a self- management intervention in persons with spinal cord injury: design of the HABITS (Healthy Active Behavioural Intervention in SCI) study, Disability and Rehabilitation, 35, 1111-1118, 2013	Reason for Exclusion (Kooijmans 2017)
Kramer, Didier N., Landolt, Markus A., Early psychological intervention in accidentally injured children ages 2-16: a randomized controlled trial, European Journal of Psychotraumatology, 5, 2014	Population not in PICO - individuals at risk for development of PTSD
Krichbaum, K., GAPN postacute care coordination improves hip fracture outcomes, West J Nurs Res, 29, 523-44, 2007	Population not in PICO - acute hip fracture patients without chronic rehabilitation needs.
Larroque, C. M., Abrams, A. N., Psychotherapy techniques for treating the medically ill or injured child, Journal of the American Academy of Child and Adolescent Psychiatry, 56, S117, 2017	Conference abstract
Lebon, Florent, Guillot, Aymeric, Collet, Christian, Badia, Binkley Bodian Christakou Christakou Cohen Cramer Cupal Decety Derscheid Dowling Drechsler Driediger Ekblom Evans Green Guillot Hale Heil Hermens Hoher Holmes Hortobagyi Hakkinen levleva Jeannerod Kaneko Kosslyn Law Liepert Lotze Louis Milne Mizner Moseley Moseley Newsom Ranganathan Ranganathan Richardson Roos Rushall Sordoni Sordoni Stinear Taylor Watson Yeung Yue Zijdewind, Increased muscle activation following motor imagery during the rehabilitation of the anterior cruciate ligament, Applied Psychophysiology and Biofeedback, 37, 45-51, 2012	Population not in PICO - do not get admitted to hospital with ligament tear.
Li, E. J. Q., Li-Tsang, C. W. P., Lam, C. S., Hui, K. Y. L., Chan, C. C. H., The effect of a "training on work readiness" program for workers with musculoskeletal injuries: A randomized control trial (RCT) study, Journal of Occupational Rehabilitation, 16, 529-541, 2006	Intervention not in PICO - 'Return to Work' intervention, crosses over with RTW NICE guideline.
Li, Yan, Bressington, Daniel, Chien, Wai Tong, Systematic Review of Psychosocial Interventions for People With Spinal Cord Injury During Inpatient Rehabilitation: Implications for Evidence-Based Practice, Worldviews on evidence-based nursing, 14, 499-506, 2017	Systematic review - studies checked for possible inclusion. One was identified.
Li, Yan, Bressington, Daniel, Chien, Wai-Tong, Pilot evaluation of a coping-oriented supportive program for people with spinal cord injury during inpatient rehabilitation, Disability and Rehabilitation, 41, 182-190, 2019	Non-randomised study, n<100 per treatment arm.
Lin, Pi-Chu, Wang, Ching-Hui, Chen, Chyang- Shiong, Liao, Li-Ping, Kao, Shu-Fen, Wu, Heng- Fei, To evaluate the effectiveness of a discharge-planning programme for hip fracture patients, Journal of Clinical Nursing, 18, 1632- 1639, 2009	Intervention not in PICO - discharge-planning programme

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	Dessen for Evolution
Study	Reason for Exclusion
Littleton, S. M., Hughes, D. C., Gopinath, B., Robinson, B. J., Poustie, S. J., Smith, P. N., Cameron, I. D., The health status of people claiming compensation for musculoskeletal injuries following road traffic crashes is not altered by an early intervention programme: A comparative study, Injury, 45, 1493-1499, 2014	Non-randomised study, n<100 per treatment arm.
London, M., Motivating the back injury patient, Rehab management, 12, 46-81, 1999	Narrative review
Longabaugh, R., Woolard, R. F., Nirenberg, T. D., Minugh, A. P., Becker, B., Clifford, P. R., Carty, K., Sparadeo, F., Gogineni, A., Evaluating the effects of a brief motivational intervention for injured drinkers in the emergency department, Journal of Studies on Alcohol, 62, 806-816, 2001	Population not in PICO - hazardous or harmful drinkers
MacGillivray, M. K., Mortenson, W. B., Sadeghi, M., Mills, P. B., Adams, J., Sawatzky, B. J., Implementing a self-management mobile app for spinal cord injury during inpatient rehabilitation and following community discharge: A feasibility study, Journal of Spinal Cord Medicine, 2019	No comparative data
Mackay, J., Charles, S. T., Kemp, B., Heckhausen, J., Goal striving and maladaptive coping in adults living with spinal cord injury: associations with affective well-being, Journal of aging and health, 23, 158-176, 2011	No comparative data
Maddern, L. H., Cadogan, J. C., Emerson, M. P., 'Outlook': A psychological service for children with a different appearance, Clinical Child Psychology and Psychiatry, 11, 431-443, 2006	No comparative data
Magia, F., Bhise, A., Prabhakar, M., Shukla, Y., Effect of pranayama (yogic breathing) on lung function in traumatic thoracic spinal cord injury patients: An interventional study, Physiotherapy (United Kingdom), 101, eS927, 2015	Conference abstract
Magill, M., Apodaca, T., The route to change: Within-session predictors of Change Plan completion in a motivational interview, Alcoholism: Clinical and Experimental Research, 33, 112A, 2009	Conference abstract
Magill, M., Apodaca, T. R., An exploratory principal component analysis of the Motivational Interviewing Skill code: What do therapists and clients do in mi sessions?, Alcoholism: Clinical and Experimental Research, 34, 229A, 2010	Conference abstract
Mamashli, Leila, Mohaddes Ardebili, Fatemeh, Bozorgnejad, Mehri, Najafi Ghezeljeh, Tahereh, Manafi, Farzad, The Effect of Self-Care Compact Disk-Based Instruction Program on Physical Performance and Quality of Life of Patients with Burn At-Dismissal, World journal of plastic surgery, 8, 25-32, 2019	Comparison not in PICO - standard discharge instructions
Manzone, M. G., Mastronardi, L., Aleotti, S., Pontini, I., Massazza, G., Integration of psychological intervention to trauma patients and their family in medical care, Early	Conference abstract

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study Intervention in Psychiatry, 10, 216, 2016	Reason for Exclusion
Marsac, M. L., Kassam-Adams, N., Hildenbrand, A. K., Kohser, K. L., Winston, F. K., After the injury: initial evaluation of a web-based intervention for parents of injured children, Health Education Research, 26, 1-12, 2011	Non-randomised study, n<100 per treatment arm.
Martin, G., Swannell, S., Mill, J., Mott, J., Evans, J., Frederiksen, N., Hilder, M., Kimble, R., Spray on skin improves psychosocial functioning in pediatric burns patients: A randomized controlled trial, Burns, 34, 498-504, 2008	Analyses and outcomes not in PICO - family and behavioural functioning. Satisfaction measured but not reported by intervention/control.
Martin-Herz, S. P., Thurber, C. A., Patterson, D. R., Psychological principles of burn wound pain in children. II: Treatment applications, The Journal of burn care & rehabilitation, 21, 458-457, 2000	Narrative review
Maskell, J., Newcombe, P., Martin, G., Kimble, R., Psychological and psychosocial functioning of children with burn scarring using cosmetic camouflage: A multi-centre prospective randomised controlled trial, Burns, 40, 135-149, 2014	Population not in PICO - under 18 years old
McGilton, K. S., Davis, A. M., Naglie, G., Mahomed, N., Flannery, J., Jaglal, S., Cott, C., Stewart, S., Evaluation of patient-centered rehabilitation model targeting older persons with a hip fracture, including those with cognitive impairment, BMC geriatrics, 13, 136, 2013	Non-randomised study, n<100 per treatment arm.
Meade, M. A., Trumpower, B., Forchheimer, M., Diponio, L., Development and feasibility of health mechanics: A self-management program for individuals with spinal cord injury, Topics in Spinal Cord Injury Rehabilitation, 22, 121-134, 2016	Intervention and comparison not included in PICO - not standard rehabilitation care
Meade, M. A., Wilson, C., Issues of implementation and feasibility of an in-person, individually administered self-management intervention for adults with spinal cord injury, Journal of Spinal Cord Medicine, 36, 514-515, 2013	Conference abstract
Mello, M. J., Baird, J., Lee, C., Strezsak, V., French, M. T., Longabaugh, R., A Randomized Controlled Trial of a Telephone Intervention for Alcohol Misuse with Injured Emergency Department Patients, Annals of Emergency Medicine, 67, 263-275, 2016	Outcomes not in PICO - past 30-day alcohol use at 12 months, injuries and alcohol-related injuries, alcohol-related negative consequences, and impaired driving frequency.
Mello, M. J., Baird, J., Strezsak, V., Lee, C., Longabaugh, R., A telephone intervention for risky alcohol use with injured emergency department patients, Annals of Emergency Medicine, 66, S104-S105, 2015	Conference abstract
Millikan, J. S., On the other side of the door, The Journal of trauma, 55, 1007-1013, 2003	Editorial
Mohammadi Fakhar, F., Rafii, F., Jamshidi Orak, R., The effect of jaw relaxation on pain anxiety during burn dressings: Randomised clinical trial,	Outcome not in PICO - pain anxiety

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

needs after traumatic injury	
Study	Reason for Exclusion
Burns, 39, 61-67, 2013	
Morlett-Paredes, A., Perrin, P. B., Olivera, S. L., Rogers, H. L., Perdomo, J. L., Arango, J. A., Arango-Lasprilla, J. C., With a little help from my friends: social support and mental health in SCI caregivers from Neiva, Colombia, Neurorehabilitation, 35, 841-9, 2014	Non-comparative study
Moseley, G. Lorimer, Gallace, Alberto, Spence, Charles, Is mirror therapy all it is cracked up to be? Current evidence and future directions, Pain, 138, 7-10, 2008	Narrative review
 Mullen, J., McKechnie, K., Niedzwecki, C., Baize, C., Gammon, S., Giovannetti, B., Lathem, P., Leger, K. L., Vakharia, M., Wirt, Z., Young, A., Stoplight mobility alert system (SMAS): Communication of mobility status for falls prevention, Archives of Physical Medicine and Rehabilitation, 96, e34, 2015 	Conference abstract
Murray, K., Corney, J., Moore-Millar, K., Cairns, N., Extending the life and improving the appearance of cosmetic foam covers for people with trans-femoral amputations, Prosthetics and Orthotics International, 39, 198, 2015	Conference abstract
Naglie, G., Tansey, C., Kirkland, J. L., Ogilvie- Harris, D. J., Detsky, A. S., Etchells, E., Tomlinson, G., O'Rourke, K., Goldlist, B., Interdisciplinary inpatient care for elderly people with hip fracture: A randomized controlled trial, CMAJ, 167, 25-32, 2002	Intervention not in PICO - interdisciplinary care
Najafi Ghezeljeh, T., Mohades Ardebili, F., Rafii, F., The effects of massage and music on pain, anxiety and relaxation in burn patients: Randomized controlled clinical trial, Burns : journal of the International Society for Burn Injuries, 43, 1034-1043, 2017	Outcomes not in PICO - very short term effects (immediately after intervention)
Nanney, John T., Conrad, Erich J., Reuther, Erin T., Wamser-Nanney, Rachel A., McCloskey, Michael, Constans, Joseph I., Motivational Interviewing for Victims of Armed Community Violence: A Nonexperimental Pilot Feasibility Study, Psychology of violence, 8, 259-268, 2018	Non-randomised study, n<100 per treatment arm.
Newman, S. D., Andrews, J. O., Toatley, S. L., Rodgers, M. D., Epperly, D., Gillenwater, G., A peer navigation intervention for individuals with spinal cord injury, Journal of Spinal Cord Medicine, 37, 439-440, 2014	Conference abstract
Noroozi, S., Mokhtariaraghi, H., Barzoki, M. H., The effectiveness of trauma-focused cognitive- behavioural therapy in the treatment of depression of divorced women in Tehran, Australasian Medical Journal, 11, 245-252, 2018	Population not in PICO - divorced women
Ogawa, Tatsuya, Omon, Kyohei, Yuda, Tomohisa, Ishigaki, Tomoya, Imai, Ryota, Ohmatsu, Satoko, Morioka, Shu, Short-term effects of goal-setting focusing on the life goal concept on subjective well-being and treatment engagement in subacute inpatients: a quasi-	Non-randomised study, n<100 per treatment arm.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
randomized controlled trial, Clinical Rehabilitation, 30, 909-20, 2016	
Ormhaug, S. M., Jensen, T. K., Wentzel-Larsen, T., Shirk, S. R., The therapeutic alliance in treatment of traumatized youths: Relation to outcome in a randomized clinical trial, Journal of Consulting and Clinical Psychology, 82, 52-64, 2014	Population not in PICO - traumatised youth
Oshvandi, K., Fallahinia, G. H., Azami, H., Tapak, L., The effect of music with relaxation on the patients' pain intensity due to burn dressing, Journal of Chemical and Pharmaceutical Sciences, 2016, 57-60, 2016	Intervention not in PICO - burn care, not rehabilitation.
Oude Voshaar, Richard C., Banerjee, Sube, Horan, Mike, Baldwin, Robert, Pendleton, Neil, Proctor, Rebekah, Tarrier, Nicholas, Woodward, Yvonne, Burns, Alistair, Fear of falling more important than pain and depression for functional recovery after surgery for hip fracture in older people, Psychological Medicine, 36, 1635-45, 2006	Intervention not in PICO - cognitive behavioural therapy designed to treat depression in geriatric hip fracture patients.
Ozturk, A., Ucsular, F. D., Effectiveness of a wheelchair skills training programme for community-living users of manual wheelchairs in Turkey: a randomized controlled trial, Clin Rehabil, 25, 416-24, 2011	Population not in PICO - manual wheelchair users, not traumatic injury.
Pantera, E., Fages, P., Cristina, M. C., Coudeyre, E., Therapeutic education after amputation: Literature's review, Annals of Physical and Rehabilitation Medicine, 56, e145- e146, 2013	Conference abstract
Pantera, E., Pourtier-Piotte, C., Bensoussan, L., Coudeyre, E., Patient education after amputation: Systematic review and experts' opinions, Annals of Physical and Rehabilitation Medicine, 57, 143-158, 2014	Systematic review - studies checked for possible inclusion. None were identified.
Patterson, R. W., Bushnik, T., Burdsall, D., Wright, J., Considerations of peer support for persons with high tetraplegia, Topics in Spinal Cord Injury Rehabilitation, 10, 30-37, 2005	Narrative decription of intervention
Perkes, S. J., Bowman, J., Penkala, S., Psychological therapies for the management of co-morbid depression following a spinal cord injury: a systematic review, Journal of health psychology, 19, 1597-1612, 2014	Systematic review - references checked for possible studies. None were identified.
Peterson, Margaret G. E., Ganz, Sandy B., Allegrante, John P., Cornell, Charles N., High- Intensity Exercise Training Following Hip Fracture, Topics in Geriatric Rehabilitation, 20, 273-284, 2004	Intervention not in PICO - high intensity exercise.
Pham, C. H., Fang, M., Nager, J., Matsushima, K., Inaba, K., Kuza, C. M., The Role of Psychological Support Interventions in Trauma Patients on Mental Health Outcomes: A Systematic Review and Meta-Analysis, The journal of trauma and acute care surgery, 2019	Systematic review - studies checked for possible inclusion. None were identified.
Phillips, V. L., Vesmarovich, S., Hauber, R.,	Intervention not in PICO – Individual telephone

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	Dessen for Evolusion
Study Wiggers, E., Egner, A., Telehealth: reaching out	Reason for Exclusion and video rehabilitation education sessions
to newly injured spinal cord patients, Public health reports (Washington, D.C. : 1974), 116 Suppl 1, 94-102, 2001	
Pisconti, F., Santos, S. M. S., Lopes, J., Cardoso, J. R., Lavado, E. L., Cross-cultural and psychometric properties assessment of the exercise self-efficacy scale in individuals with spinal cord injury, Acta Medica Portuguesa, 30, 783-789, 2017	No comparative data
Pjanic, I., Messerli-Burgy, N., Bachmann, M. S., Siegenthaler, F., Hoffmann-Richter, U., Znoj, H., Predictors of depressed mood 12 months after injury. Contribution of self-efficacy and social support, Disability and Rehabilitation, 36, 1258- 1263, 2014	No comparative data
Plaza, A., Paratz, J., Stockton, K., Muller, M., Hoskin, B., Exercise programmes are effective and safe in a burns population: A controlled trial, Journal of Burn Care and Research, 32, S117, 2011	Conference abstract
Pol, M. C., Ter Riet, G., van Hartingsveldt, M., Krose, B., Buurman, B. M., Effectiveness of sensor monitoring in a rehabilitation programme for older patients after hip fracture: a three-arm stepped wedge randomised trial, Age and Ageing, 2019	Analyses and outcomes not in PICO
Postma, K., Haisma, J. A., Hopman, M. T., Bergen, M. P., Stam, H. J., Bussmann, J. B., Resistive inspiratory muscle training in people with spinal cord injury during inpatient rehabilitation: a randomized controlled trial, Physical Therapy, 94, 1709-1719, 2014	Intervention not in PICO - resistive inspiratory muscle training
Pourmand, Ali, Davis, Steven, Lee, Danny, Barber, Scott, Sikka, Neal, Emerging Utility of Virtual Reality as a Multidisciplinary Tool in Clinical Medicine, Games for health journal, 6, 263-270, 2017	Systematic review - included studies searched for possible inclusions. None were identified.
Prang, K. H., Berecki-Gisolf, J., Newnam, S., The influence of social support on healthcare service use following transport-related musculoskeletal injury, BMC health services research, 16, 310, 2016	No comparative data
Prang, K. H., Berecki-Gisolf, J., Newnam, S., Recovery from musculoskeletal injury: The role of social support following a transport accident, Health and Quality of Life Outcomes, 13, 97, 2015	No comparative data
Prensner, J. D., Yowler, C. J., Smith, L. F., Steele, A. L., Fratianne, R. B., Music therapy for assistance with pain and anxiety management in burn treatment, Journal of Burn Care and Rehabilitation, 22, 83-88, 2001	Case series
Purdue, G. F., Hunt, J. L., Burns and trauma, Problems in General Surgery, 20, 106-111, 2003	Narrative review
Quan, Judy, Managing the occupational injury case: do you manage or monitor?, Professional	Editorial

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
case management, 13, 116-7, 2008	
Rajanna, V., Vo, P., Barth, J., Mjelde, M., Grey, T., Oduola, C., Hammond, T., KinoHaptics: An Automated, Wearable, Haptic Assisted, Physio- therapeutic System for Post-surgery Rehabilitation and Self-care, Journal of Medical Systems, 40, 1-12, 2016	Non-randomised study, n<100 per treatment arm.
Ramirez, M., Toussaint, M., Woods-Jaeger, B., Harland, K., Wetjen, K., Wilgenbusch, T., Pitcher, G., Jennissen, C., Link for Injured Kids: A Patient-Centered Program of Psychological First Aid after Trauma, Pediatric Emergency Care, 33, 532-537, 2017	Qualitative study
Rintala, D. H., Garber, S. L., Friedman, J. D., Holmes, S. A., Preventing recurrent pressure ulcers in veterans with spinal cord injury: impact of a structured education and follow-up intervention, Arch Phys Med Rehabil, 89, 1429- 41, 2008	Outcomes not in PICO - pressure ulcer recurrence.
Robb, Sheri L., Nichols, Ray J., Rutan, Randi L., Bishop, Bonnie L., Parker, Jayne C., The effects of music assisted relaxation on preoperative anxiety, Journal of Music Therapy, 32, 2-21, 1995	Outcome not in PICO - operative anxiety
 Roberts, J. L., Pritchard, A. W., Williams, M., Totton, N., Morrison, V., D. In N.U, Williams, N. H., Mixed methods process evaluation of an enhanced community-based rehabilitation intervention for elderly patients with hip fracture, BMJ Open, 8 (8) (no pagination), 2018 	No quantitative data presented
Roosink, Meyke, Robitaille, Nicolas, Jackson, Philip L., Bouyer, Laurent J., Mercier, Catherine, Baumbauer, Beaumont Betker Boudreau Bouffard Bowering Decety Di Rienzo Donnelly Gustin Jackson Jeannerod Kizony Kumru Lamothe Longo Malouin Malouin Malouin Mercier Mercier Moseley Moseley Moseley Moseley Mulder Raffin Roosink Sayenko Sharp Siddall Soler Sumitani Tawashy Turner Villiger Villiger Widerstrom-Noga Witmer Zigmond Zimmerli, Interactive virtual feedback improves gait motor imagery after spinal cord injury: An exploratory study, Restorative Neurology and Neuroscience, 34, 227-235, 2016	Non-randomised study, n<100 per treatment arm.
Rottkamp, B. C., An experimental nursing study: a behavior modification approach to nursing therapeutics in body positioning of spinal cord- injured patients, Nurs Res, 25, 181-6, 1976	Date restriction, pre-1995.
Rowland, Jennifer L., White, Glen W., Wyatt, David A., Analysis of An Intervention to Reduce or Prevent Secondary Conditions for People with Spinal Cord Injuries, Journal of Clinical Psychology in Medical Settings, 13, 263-271, 2006	Outcomes not in PICO - development of secondary conditions.
Rubin, E., Ostrowsky, L., Janopaul-Naylor, E., Sehgal, P., Cama, S., Tanski, E., Curtin, C., The sibling support demonstration project: A pilot	Population not in PICO - psychiatric inpatients.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
study assessing feasibility, preliminary effectiveness, and participant satisfaction, Adolescent Psychiatry, 8, 48-60, 2018	
Ruchlin, H. S., Elkin, E. B., Allegrante, J. P., The economic impact of a multifactorial intervention to improve postoperative rehabilitation of hip fracture patients, 45, 446-52, 2001	Outcomes not in PICO - health economic outcomes only.
Rutherford, L. G., von Wenckstern, T., Trauma Information Group: A Level I Trauma Center's Integrated Approach to Family Support, Journal of trauma nursing : the official journal of the Society of Trauma Nurses, 23, 357-360, 2016	No comparative data
 Ryan, C. M., Lee, A. F., Kazis, L. E., Schneider, J. C., Palmieri, T. L., Pidcock, F., Reilly, D. A., Meyer, Iii W. J., Sheridan, R. L., Tompkins, R. G., The impact of facial burns on patient reported health outcomes following burn injuries in young adults: A five year study, Journal of Burn Care and Research, 36, S94, 2015 	Conference abstract
Sabino, J., Polfer, E., Tintle, S., Jessie, E., Fleming, M., Martin, B., Shashikant, M., Valerio, I. L., A decade of conflict: flap coverage options and outcomes in traumatic war-related extremity reconstruction, Plastic and Reconstructive Surgery, 135, 895-902, 2015	Intervention not in PICO - surgical reconstruction
Sathiya, K., Effect of Progressive Relaxation Therapy among Orthopaedic Trauma Patients, The Nursing journal of India, 106, 186-189, 2015	Outcome not in PICO - post traumatic stress disorder
Saw, A., Chan, C. K., Penafort, R., Sengupta, S., A simple practical protocol for care of metal- skin interface of external fixation, Medical Journal of Malaysia, 61, 2006	Paper unavailable.
Seehausen, A., Ripper, S., Germann, G., Hartmann, B., Wind, G., Renneberg, B., Efficacy of a burn-specific cognitive-behavioral group training, Burns, 41, 308-316, 2015	Non-randomised study, n<100 per treatment arm.
Seel, R. T., Douglas, J., Dennison, A. C., Heaner, S., Farris, K., Rogers, C., Specialized early treatment for persons with disorders of consciousness: program components and outcomes, Archives of Physical Medicine & RehabilitationArch Phys Med Rehabil, 94, 1908- 23, 2013	No comparative data
Shamout, S., Biardeau, X., Corcos, J., Campeau, L., Outcome comparison of different approaches to self-intermittent catheterization in neurogenic patients: a systematic review, Spinal Cord, 55, 629-643, 2017	Systematic review - studies checked for possible inclusion. None were identified.
Shepherd-Banigan, Megan E., Shapiro, Abigail, McDuffie, Jennifer R., Brancu, Mira, Sperber, Nina R., Van Houtven, Courtney H., Kosinski, Andrzej S., Mehta, Neha N., Nagi, Avishek, Williams, John W., Jr., Interventions That Support or Involve Caregivers or Families of Patients with Traumatic Injury: a Systematic Review, Journal of General Internal Medicine, 33, 1177-1186, 2018	Systematic review - studies checked for possible inclusion. None were identified.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Shields, B. A., Brown, J. N., Aden, J. K.,	Non-randomised study, n<100 per treatment
Salgueiro, M., Mann-Salinas, E. A., Chung, K. K., A pilot review of gradual versus goal re- initiation of enteral nutrition after burn surgery in the hemodynamically stable patient, Burns, 40, 1587-1592, 2014	arm.
Shyu, Y. I., Liang, J., Tseng, M. Y., Li, H. J., Wu, C. C., Cheng, H. S., Chou, S. W., Chen, C. Y., Yang, C. T., Enhanced interdisciplinary care improves self-care ability and decreases emergency department visits for older Taiwanese patients over 2 years after hip- fracture surgery: a randomised controlled trial, International Journal of Nursing Studies, 56, 54- 62, 2016	Intervention not in PICO - comprehensive care includes referral for depression management but not part of treatment plan.
Shyu, Yea-Ing L., Liang, Jersey, Wu, Chi- Chuan, Su, Juin-Yih, Cheng, Huey-Shinn, Chou, Shih-Wei, Chen, Min-Chi, Yang, Ching-Tzu, Adunsky, Burke Cameron Cameron Cameron Chen Chuang Crotty Hollis Kraemer Lieberman Liou Rubin Liu Randell Rubin Ryan Schafer Shyu Chen Liang Vidan Yip, Interdisciplinary intervention for hip fracture in older Taiwanese: Benefits last for 1 year, The Journals of Gerontology: Series A: Biological Sciences and Medical Sciences, 63, 92-97, 2008	Intervention not in PICO - comprehensive care includes referral for depression management but not part of treatment plan
Shyu, Yea-Ing Lotus, Liang, Jersey, Wu, Chi- Chuan, Su, Juin-Yih, Cheng, Huey-Shinn, Chou, Shih-Wei, Yang, Ching-Tzu, Adunsky, Aharonoff Ahmad Burke Chen Chen Cleeland Crotty Dai Farnworth Huusko Huusko Katz Launer Lee Lee Liu Lu Magaziner Mellinger Mossey Munin Norton O'Cathain Ostir Rubenstein Runciman Sherrington Shyu Shyu Shyu Stuck Tappen Tinetti Tsai Tseng Von Sternberg Wang Wang Yip Yip, A Pilot Investigation of the Short-Term Effects of an Interdisciplinary Intervention Program on Elderly Patients with Hip Fracture in Taiwan, Journal of the American Geriatrics Society, 53, 811-818, 2005	Intervention not in PICO - comprehensive care includes referral for depression management but not part of treatment plan
Sibinga, E., Webb, L., Ellen, J., Mindfulness instruction improves anger regulation in US urban male youth, BMC Complementary and Alternative Medicine, 17, 2017	Conference abstract
Smith, M., Amputation: the transition from hospital to home, Nursing times, 95, 52-53, 1999	Paper unavailable.
Sorokin, Igor, De, Elise, Options for independent bladder management in patients with spinal cord injury and hand function prohibiting intermittent catheterization, Neurourology and Urodynamics, 34, 167-76, 2015	Literature review - references checked for studies. None were identified.
Spence, S. H., Cognitive-behavior therapy in the management of upper extremity cumulative trauma disorder, Journal of Occupational Rehabilitation, 8, 27-45, 1998	Narrative review
Spooner, A., A personal perspective: the psychological needs of spine-injured patients,	Case study

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Cénida.	Passan for Evolution
Study Professional nurse (London, England), 10, 359-	Reason for Exclusion
362, 1995	
Staffel, J. Gregory, Optimizing treatment of nasal fractures, The Laryngoscope, 112, 1709-19, 2002	Non-randomised study, n<100 per treatment arm.
Stanback, R., Rebuilding lives after injury, Nursing times, 110, 27, 2014	Editorial
Stoddard, F. J., Sorrentino, E. A., Murphy, J. M., Chedekel, D. S., White, G. W., Saxe, G. N., Buterbaugh, D., Doyne, T., Zbell, T., Clark, S., Benefits of an intervention to reduce stress in 0- 5 year olds with burns: Updated findings, Journal of Burn Care and Research, 32, S147, 2011	Conference abstract
Sullivan, Michael J. L., Adams, Heather, Thibault, Pascal, Corbiere, Marc, Stanish, William D., Initial depression severity and the trajectory of recovery following cognitive- behavioral intervention for work disability, Journal of Occupational Rehabilitation, 16, 63- 74, 2006	Comparison not in PICO - people with differing levels of depression
Sveen, Josefin, Andersson, Gerhard, Buhrman, Bo, Sjoberg, Folke, Willebrand, Mimmie, Internet-based information and support program for parents of children with burns: A randomized controlled trial, Burns : journal of the International Society for Burn Injuries, 43, 583- 591, 2017	Outcomes not in PICO - parent's PTSD, parent's health, child's health as perceived by parent and research participation
Tang, D., Li-Tsang, C. W. P., Au, R. K. C., Li, K. C., Yi, X. F., Liao, L. R., Cao, H. Y., Feng, Y. N., Liu, C. S., Functional Outcomes of Burn Patients with or Without Rehabilitation in Mainland China, Hong Kong Journal of Occupational Therapy, 26, 15-23, 2015	Non-randomised study, n<100 per treatment arm.
Task Force on Community Preventive, Services, Recommendations to reduce psychological harm from traumatic events among children and adolescents, American journal of preventive medicine, 35, 314-6, 2008	Narrative review
Taylor, Rumina, Mellotte, Harriet, Griffiths, Maria, Compton, Agnes, Valsraj, Koravangattu, Aaltonen, Angermeyer Askey Barkham Berglund Borghetti Valer Boye Broadbent Carter Cohen Connell Crisp Falloon Falloon Fleury Garcia Glick Gracio Kuipers Mansell Norman Novak Onwumere Schweitzer Stanbridge Stanbridge Tennant Worthington, Carers matter: Promoting the inclusion of families within acute inpatient settings, Journal of Psychiatric Intensive Care, 12, 69-77, 2016	No comparative data.
Tecic, Tanja, Schneider, Alexandra, Althaus, Astrid, Schmidt, Yvette, Bierbaum, Christine, Lefering, Rolf, Mueller, Dirk, Bouillon, Bertil, Janssen, Christian, Pfaff, Holger, Erli, Hans J., Rangger, Christoph, Neugebauer, Edmund A. M., Early short-term inpatient psychotherapeutic treatment versus continued outpatient	Intervention not in PICO - psychotherapy designed to reduce PTSD

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Chudu	Reason for Exclusion
Study psychotherapy on psychosocial outcome: a randomized controlled trial in trauma patients, The Journal of trauma, 70, 433-41, 2011	
Theodorakis, Y., Beneca, A., Malliou, P., Goudas, M., Examining psychological factors during injury rehabilitation, Journal of Sport Rehabilitation, 6, 355-363, 1997	Non-randomised study, n<100 per treatment arm.
Thieme, Holm, Morkisch, Nadine, Rietz, Christian, Dohle, Christian, Borgetto, Bernhard, Acerra, Attal Bellelli Bowering Breivik Breivik Brodie Buccino Cacchio Cacchio Celnik Chan Chapman Christakou Decety Dickstein Dohle Dworkin Dworkin Ezendam Finnerup Flor Galer Gaskin Giraux Gore Gore Gustorff Holen Hoyek Jensen Kumar Lebon MacIver Maher Maihofner Manca McCabe Michenthaler Michielsen Moseley Moseley Moseley Noseley Nemeth O'Connell O'Connor Park Pelosin Perry Ramachandran Ramachandran Rothgangel Savas Seidel Stein Straube Sumitani Swart Thieme Ulger Villiger Zimmermann-Schlatter, The efficacy of movement representation techniques for treatment of limb pain-A systematic review and meta-analysis, The Journal of Pain, 17, 167-180, 2016	Systematic review - studies checked for possible inclusion. None were identified.
Tidoni, E., Tieri, G., Aglioti, S. M., Aflalo, Aglioti Aglioti Aglioti Aglioti Alimardani Alkadhi Arrighi Awad Berlucchi Bickenbach Birbaumer Birbaumer Boord Botvinick Bruehlmeier Brumberg Castro Cermik Choi Collinger Corbetta Cramer Cramer Crawley Curt Curt Curt Daly De Vignemont Decety Di Rienzo Di Rienzo Do Enzinger Finnerup Fiori Freund Freund Fuentes Gergondet Goodwin Gourab Green Green Guger Guger Gustin Gustin Gustin Henderson Herbert Hochberg Hohne Hotz- Boendermaker Hou Huggins Ikegami Jensen Jurkiewicz Jurkiewicz Kakulas Kalckert Kalckert Kambi King Kirshblum Koenraadt Kumru Lacourse Lebedev Lee Leeb Leeb Leeb Lenggenhager Lenggenhager Leonardis Leonardis Lotze Mak Manson Mattia Mikulis Millan Mole Moore Nardone Nardone Neuper Onose Ortner Pascoal-Faria Perez-Marcos Pernigo Pfurtscheller Pfurtscheller Pisotta Pons Rodrigues Roelcke Rognoni Rosso Roy Rupp Sabbah Sabre Sakurada Sanchez- Vives Scandola Scherer Scivoletto Serino Shoham Soler Tidoni Tidoni Tidoni Tieri Tinazzi Touzalin-Chretien Tran Truccolo Tsakiris Van Gorp Villiger Vuckovic Wang Williams Wolpaw Wrigley Wydenkeller Xu Yao Yoon Zhu, Re-establishing the disrupted sensorimotor loop in deafferented and deefferented people: The case of spinal cord injuries, Neuropsychologia, 79, 301-309, 2015	Narrative review
Tung, J. Y., Stead, B., Mann, W., Ba'Pham,, Popovic, M. R., Assistive technologies for self- managed pressure ulcer prevention in spinal	Systematic review - studies checked for possible inclusion. None were identified.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Cturdur	Person for Evolution
Study cord injury: A scoping review, Journal of	Reason for Exclusion
Rehabilitation Research and Development, 52, 131-146, 2015	
Turpin, G., Downes, M., Mason, S., Effectiveness of giving self-help information acute traumatic injury: a randomised controlled trial, British Journal of Psychiatry, 187, 76â 82, 2005	Duplicate paper
Turpin, G., Downs, M., Mason, S., Effectiveness of providing self-help information following acute traumatic injury: randomised controlled trial, British journal of psychiatry, 187, 76â 82, 2005	Population not in PICO - survivors of road traffic accident, occupational injury or assault at risk of developing PTSD.
Turunen, K., Salpakoski, A., Edgren, J., Tormakangas, T., Arkela, M., Kallinen, M., Pesola, M., Hartikainen, S., Nikander, R., Sipila, S., Physical Activity After a Hip Fracture: Effect of a Multicomponent Home-Based Rehabilitation Program-A Secondary Analysis of a Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 98, 981- 988, 2017	Outcomes not in PICO - physical activity
Van Biervliet, A., Gest, T. R., A multimedia guide to spinal cord injury: empowerment through self instruction, Medinfo. MEDINFO, 8 Pt 2, 1701, 1995	Description of intervention
van Langeveld, S. A., Post, M. W., van Asbeck, F. W., ter Horst, P., Leenders, J., Postma, K., Lindeman, E., Reliability of a New Classification System for Mobility and Self-Care in Spinal Cord Injury Rehabilitation: The Spinal Cord Injury- Interventions Classification System, Archives of Physical Medicine and Rehabilitation, 90, 1229- 1236, 2009	Duplicate paper
Visser, E., Gosens, T., Den Oudsten, B. L., De Vries, J., The course, prediction, and treatment of acute and posttraumatic stress in trauma patients: A systematic review, Journal of Trauma and Acute Care Surgery, 82, 1158-1183, 2017	Population not in PICO - individuals with acute stress disorder or PTSD
Vogel, L. C., Anderson, C. J., Spinal cord injuries in children and adolescents: A review, Journal of Spinal Cord Medicine, 26, 193-203, 2003	Narrative review
Vranceanu, A. M., Hageman, M., Strooker, J., ter Meulen, D., Vrahas, M., Ring, D., A preliminary RCT of a mind body skills based intervention addressing mood and coping strategies in patients with acute orthopaedic trauma, Injury, 46, 552â 557, 2015	Intervention not in PICO - specific pain management intervention.
Wang, Zhiyun, Wang, Jianping, Maercker, Andreas, Program Use and Outcome Change in a Web-Based Trauma Intervention: Individual and Social Factors, Journal of Medical Internet Research, 18, e243, 2016	No comparative data
Watkins, P. N., Cook, E. L., May, S. R., Still, J. M., Jr., Luterman, A., Purvis, R. J., Postburn psychologic adaptation of family members of	Case series

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Study patients with burns, The Journal of burn care &	
rehabilitation, 17, 78-92, 1996	
Wegener, Stephen T., Mackenzie, Ellen J., Ephraim, Patti, Ehde, Dawn, Williams, Rhonda, Self-management improves outcomes in persons with limb loss, Archives of Physical Medicine and Rehabilitation, 90, 373-80, 2009	Population not in PICO - support groups for amputees
Wethington, Holly R., Hahn, Robert A., Fuqua- Whitley, Dawna S., Sipe, Theresa Ann, Crosby, Alex E., Johnson, Robert L., Liberman, Akiva M., Moscicki, Eve, Price, Leshawndra N., Tuma, Farris K., Kalra, Geetika, Chattopadhyay, Sajal K., Task Force on Community Preventive, Services, The effectiveness of interventions to reduce psychological harm from traumatic events among children and adolescents: a systematic review, American journal of preventive medicine, 35, 287-313, 2008	Systematic review - studies checked for possible inclusion. None were identified.
Wheeler, Kathleen, Psychotherapeutic strategies for healing trauma, Perspectives in psychiatric care, 43, 132-41, 2007	Systematic review - studies checked for possible inclusion. None were identified.
Whitehead-Pleaux, A. M., Zebrowski, N., Baryza, M. J., Sheridan, R. L., Exploring the effects of music therapy on pediatric pain: phase 1, J Music Ther, 44, 217-41, 2007	Non-randomised study, n<100 per treatment arm.
Wiechman Askay, Shelley, Patterson, David R., Sharar, Samuel R., Mason, Shawn, Faber, Bertus, Pain management in patients with burn injuries, International review of psychiatry (Abingdon, England), 21, 522-30, 2009	Narrative review
Wiechman, S. A., Carrougher, G. J., Esselman, P. C., Angere, D., Klein, M. B., Gibran, N. S., A randomized controlled trial to test an expanded delivery model for patients with burn injuries, Journal of burn care & research, 35, S79, 2014	Conference abstract
Wilde, Mary H., Fairbanks, Eileen, Parshall, Robert, Zhang, Feng, Miner, Sarah, Thayer, Deborah, Harrington, Brian, Brasch, Judith, McMahon, James M., Development of a Web- Based Self-management Intervention for Intermittent Urinary Catheter Users With Spinal Cord Injury, Computers, informatics, nursing : CIN, 33, 478-86, 2015	Non-randomised study, n<100 per treatment arm.
Wilde, Mary H., Fairbanks, Eileen, Parshall, Robert, Zhang, Feng, Miner, Sarah, Thayer, Deborah, Harrington, Brian, Brasch, Judith, Schneiderman, Dan, McMahon, James M., A Web-Based Self-Management Intervention for Intermittent Catheter Users, Urologic nursing, 35, 127-138, 2015	Narrative description of new intervetion
Williams, Reg Arthur, Gatien, Gary, Hagerty, Bonnie M., Kane, Michele, Otto, Laureen, Wilson, Candy, Throop, Meryia, Addressing psychosocial care using an interactive Web site for combat-wounded patients, Perspectives in psychiatric care, 49, 152-61, 2013	No comparative data
Winje, D., Ulvik, A., Confrontations with reality:	Population not in PICO - survivors of school bus

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
crisis intervention services for traumatized families after a school bus accident in Norway, Journal of Traumatic Stress, 8, 429-44, 1995	accident at risk of developing post traumatic stress disorder
Wise, James B., Ellis, Gary D., Trunnell, Eric P., Effects of a curriculum designed to generalize self-efficacy from weight-training exercises to activities of daily living among adults with spinal injuries, Journal of Applied Social Psychology, 32, 500-521, 2002	Non-randomised study, n<100 per treatment arm.
Worobey, L. A., Kirby, R. L., Heinemann, A. W., Krobot, E. A., Dyson-Hudson, T. A., Cowan, R. E., Pedersen, J. P., Shea, M., Boninger, M. L., Effectiveness of Group Wheelchair Skills Training for People With Spinal Cord Injury: A Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 97, 1777, 2016	Outcome not in PICO - Wheelchair Skills Test Questionnaire and Goal Attainment Scale score
Worobey, L., Boninger, M., Kirby, L., Preliminary results on effectiveness of group wheelchair skills training among individuals with spinal cord injury, Archives of Physical Medicine and Rehabilitation, 96, e25, 2015	Conference abstract
Wu, K. K. Y., A randomised controlled trial of brief cognitive-behavioural therapy and a self- help booklet as early interventions for post- traumatic stress after road trajfic accident, East Asian Archives of Psychiatry, 20, 46-47, 2010	Conference abstract
Xie, L. Q., Deng, Y. L., Zhang, J. P., Richmond, C. J., Tang, Y., Zhou, J., Effects of Progressive Muscle Relaxation Intervention in Extremity Fracture Surgery Patients, Western Journal of Nursing Research, 38, 155â 168, 2016	Outcomes not in PICO - state anxiety and self- efficacy
Zadro, J. R., Shirley, D., Simic, M., Mousavi, S. J., Ceprnja, D., Maka, K., Sung, J., Ferreira, P., Video-Game-Based Exercises for Older People With Chronic Low Back Pain: A Randomized Controlledtable Trial (GAMEBACK), Physical Therapy, 99, 14-27, 2019	Intervention not in PICO - flexibility, body weight resistance, and aerobic exercises
Zhang, H., Huang, J., Long, C., Influence of psychological intervention before emergent ocular trauma surgery on patients' negative emotions, Eye science, 29, 74-77, 2014	Intervention not in PICO - pre-surgery psychological programme

1 Economic studies

- 2 All studies were excluded at the initial title and abstract screening stage. See appendix G for
- 3 further information.

1 Excluded studies for review question: B.3b What psychological and psychosocial

- 2 rehabilitation interventions are effective and acceptable for children and young
- 3 people with complex rehabilitation needs after traumatic injury?

4 Clinical studies

5 **Table 25: Excluded studies and reasons for their exclusion**

Table 25. Excluded Studies and Teasons for	
Study	Reason for Exclusion
Abou-Setta, A. M., Beaupre, L. A., Rashiq, S., Dryden, D. M., Hamm, M. P., Sadowski, C. A., Menon, M. R. G., Majumdar, S. R., Wilson, D. M., Karkhaneh, M., Mousavi, S. S., Wong, K., Tjosvold, L., Jones, C. A., Comparative effectiveness of pain management interventions for hip fracture: A systematic review, Annals of Internal Medicine, 155, 234-245, 2011	Systematic review, included studies checked for relevance. None were found.
Allegrante, J. P., Peterson, M. G., Cornell, C. N., MacKenzie, C. R., Robbins, L., Horton, R., Ganz, S. B., Ruchlin, H. S., Russo, P. W., Paget, S. A., Charlson, M. E., Methodological challenges of multiple-component intervention: lessons learned from a randomized controlled trial of functional recovery after hip fracture, Hss j, 3, 63-70, 2007	Population not in PICO – over 18 years old
Arbour-Nicitopoulos, K. P., Ginis, K. A., Latimer, A. E., Planning, leisure-time physical activity, and coping self-efficacy in persons with spinal cord injury: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 90, 2003-2011, 2009	Outcomes not in PICO - intentions and self- efficacy
Arefnasab, Z., Babamahmoodi, A., Babamahmoodi, F., Noorbala, A. A., Alipour, A., Panahi, Y., Shams, J., Rad, F. R., Khaze, V., Ghanei, M., Mindfulness-based Stress Reduction (MBSfR) and its effects on psychoimmunological factors of chemically pulmonary injured veterans, Iranian Journal of Allergy, Asthma and Immunology, 15, 476-486, 2016	Population not in PICO - veterans exposed to mustard gas and complications of Iran-Iraq war.
Arefnasab, Zahra, Babamahmoodi, Abdolreza, Babamahmoodi, Farhang, Noorbala, Ahmad Ali, Alipour, Ahmad, Panahi, Yunes, Shams, Jamal, Riazi Rad, Farhad, Khaze, Vahid, Ghanei, Mostafa, Mindfulness-based Stress Reduction (MBSR) and Its Effects on Psychoimmunological Factors of Chemically Pulmonary Injured Veterans, Iranian journal of allergy, asthma, and immunology, 15, 476-486, 2016	Population not in PICO - veterans exposed to mustard gas and complications of Iran-Iraq war.
Arrieta, H., Rezola-Pardo, C., Gil, S. M., Virgala, J., Iturburu, M., Anton, I., Gonzalez-Templado, V., Irazusta, J., Rodriguez-Larrad, A., Effects of Multicomponent Exercise on Frailty in Long- Term Nursing Homes: A Randomized Controlled Trial, Journal of the American Geriatrics Society, 67, 1145-1151, 2019	Population not in PICO: Residents at a longterm nursing home
Baker, Virginia B., Eliasen, Kathryn M., Hack, Nawaz K., Lifestyle modifications as therapy for medication refractory post-traumatic headache	Non-comparative study

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Study (PTHA) in the military population of Okinawa,	
The journal of headache and pain, 19, 113, 2018 Bakker, R., Elderdesign: Home modifications for enhanced safety and self-care, Care Management Journals, 1, 47-54, 1999	Narrative review
Baron, J. S., Sullivan, K. J., Swaine, J. M., Aspinall, A., Jaglal, S., Presseau, J., White, B., Wolfe, D., Grimshaw, J. M., Self-management interventions for skin care in people with a spinal cord injury: part 1-a systematic review of intervention content and effectiveness, Spinal Cord, 56, 823-836, 2018	Systematic review - studies checked for possible inclusion. 8 were identified.
Basilici Zannetti, Emanuela, D'Agostino, Fabio, Cittadini, Noemi, Feola, Maurizio, Pennini, Annalisa, Rao, Cecilia, Vellone, Ercole, Tarantino, Umberto, Alvaro, Rosaria, Effect of tailored educational intervention to improve self- care maintenance and quality of life in postmenopausal osteoporotic women after a fragility fracture: the Guardian Angel® study, Igiene e sanita pubblica, 73, 65-76, 2017	Full text in Italian
Berube, M., Gelinas, C., Feeley, N., Martorella, G., Cote, J., Laflamme, G. Y., Rouleau, D. M., Choiniere, M., Feasibility of a Hybrid Web-Based and In-Person Self-management Intervention Aimed at Preventing Acute to Chronic Pain Transition After Major Lower Extremity Trauma (iPACT-E-Trauma): A Pilot Randomized Controlled Trial, Pain medicine (Malden, Mass.), 2019	Intervention not in PICO - specific pain management interventions
Berube, M., Gelinas, C., Martorella, G., Feeley, N., Cote, J., Laflamme, G. Y., Rouleau, D. M., Choiniere, M., Development and Acceptability Assessment of a Self-Management Intervention to Prevent Acute to Chronic Pain Transition after Major Lower Extremity Trauma, Pain management nursing : official journal of the American Society of Pain Management Nurses, 19, 671-692, 2018	Non-randomised study, n<100 per treatment arm.
Berube, Melanie, Gelinas, Celine, Feeley, Nancy, Martorella, Geraldine, Cote, Jose, Laflamme, G. Yves, Rouleau, Dominique M., Choiniere, Manon, A Hybrid Web-Based and In- Person Self-Management Intervention Aimed at Preventing Acute to Chronic Pain Transition After Major Lower Extremity Trauma: Feasibility and Acceptability of iPACT-E-Trauma, JMIR formative research, 2, e10323, 2018	Intervention not in PICO - specific pain management interventions
Best, K. L., Miller, W. C., Huston, G., Routhier, F., Eng, J. J., Pilot Study of a Peer-Led Wheelchair Training Program to Improve Self- Efficacy Using a Manual Wheelchair: A Randomized Controlled Trial, Arch Phys Med Rehabil, 97, 37-44, 2016	Population not in PICO - wheelchair users only.
Black, O., Keegel, T., Sim, M. R., Collie, A., Smith, P., The Effect of Self-Efficacy on Return- to-Work Outcomes for Workers with Psychological or Upper-Body Musculoskeletal	Systematic review, included studies checked for relevance

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

StudyReason for ExclusionInjuries: A Review of the Literature, Journal of Occupational Rehabilitation, 28, 16-27, 2018Duplicate paperBlack, O., Keegel, T., Sim, M., Collie, A., Smith, P., The effect of self-efficacy on return-to-work outcomes for workers with psychological or upper-body musculoskeletal injuries: A review of the literature, Occupational and Environmental Medicine, 73, A207, 2016Duplicate paperBlock, P., Vanner, E. A., Keys, C. B., Rimmer, J. H., Skeels, S. E., Project Shake-It-Up: using health promotion, capacity building and a disability studies framework to increase self efficacy, Disability and Rehabilitation, 32, 741- 754, 2010Non-randomised study, n<100 per treatment arm.Bombardier, C., Fann, J. R., Ehde, D., Reyes, M. R., Hoffman, J. M., Collaborative care for pain, depression and physical inactivity in an outpatient SCI clinic: The sci-care study, Archives of Physical Medicine and Rehabilitation, 97, e78-e79, 2016Conference abstractBrunelli, S., Morone, G., Iosa, M., Ciotti, C., De Giorgi, R., Foti, C., Traballesi, M., Efficacy of progressive muscle relaxation, mental imagery, and phantom exercise training on phantom limb: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 96, 181- 187, 2015Population not in PICO - treatment and prevention of depression in hip fracture patients.Burns, A., Banerjee, S., Morris, J., Woodward, Y., Baldwin, R., Proctor, R., Tarrier, N., Destivation by Oxitationed A Machene QIntervention not in PICO - treatment and prevention of depression in hip fracture patients.
Occupational Rehabilitation, 28, 16-27, 2018Black, O., Keegel, T., Sim, M., Collie, A., Smith, P., The effect of self-efficacy on return-to-work outcomes for workers with psychological or upper-body musculoskeletal injuries: A review of the literature, Occupational and Environmental Medicine, 73, A207, 2016Duplicate paperBlock, P., Vanner, E. A., Keys, C. B., Rimmer, J. H., Skeels, S. E., Project Shake-It-Up: using health promotion, capacity building and a disability studies framework to increase self efficacy, Disability and Rehabilitation, 32, 741- 754, 2010Non-randomised study, n<100 per treatment arm.Bombardier, C., Fann, J. R., Ehde, D., Reyes, M. R., Hoffman, J. M., Collaborative care for pain, depression and physical inactivity in an outpatient SCI clinic: The sci-care study, Archives of Physical Medicine and Rehabilitation, 97, e78-e79, 2016Conference abstractBrunelli, S., Morone, G., Iosa, M., Ciotti, C., De Giorgi, R., Foti, C., Traballesi, M., Efficacy of progressive muscle relaxation, mental imagery, and phantom exercise training on phantom limb: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 96, 181- 187, 2015Population not in PICO - treatment and prevention not in PICO - treatment and prevention of depression in hip fracture patients.
 P., The effect of self-efficacy on return-to-work outcomes for workers with psychological or upper-body musculoskeletal injuries: A review of the literature, Occupational and Environmental Medicine, 73, A207, 2016 Block, P., Vanner, E. A., Keys, C. B., Rimmer, J. H., Skeels, S. E., Project Shake-It-Up: using health promotion, capacity building and a disability studies framework to increase self efficacy, Disability and Rehabilitation, 32, 741-754, 2010 Bombardier, C., Fann, J. R., Ehde, D., Reyes, M. R., Hoffman, J. M., Collaborative care for pain, depression and physical inactivity in an outpatient SCI clinic: The sci-care study, Archives of Physical Medicine and Rehabilitation, 97, e78-e79, 2016 Brunelli, S., Morone, G., Iosa, M., Ciotti, C., De Giorgi, R., Foti, C., Traballesi, M., Efficacy of progressive muscle relaxation, mental imagery, and phantom exercise training on phantom limb: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 96, 181-187, 2015 Burns, A., Banerjee, S., Morris, J., Woodward, Y., Baldwin, R., Proctor, R., Tarrier, N.,
 H., Skeels, S. E., Project Shake-It-Up: using health promotion, capacity building and a disability studies framework to increase self efficacy, Disability and Rehabilitation, 32, 741- 754, 2010 Bombardier, C., Fann, J. R., Ehde, D., Reyes, M. R., Hoffman, J. M., Collaborative care for pain, depression and physical inactivity in an outpatient SCI clinic: The sci-care study, Archives of Physical Medicine and Rehabilitation, 97, e78-e79, 2016 Brunelli, S., Morone, G., Iosa, M., Ciotti, C., De Giorgi, R., Foti, C., Traballesi, M., Efficacy of progressive muscle relaxation, mental imagery, and phantom exercise training on phantom limb: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 96, 181- 187, 2015 Burns, A., Banerjee, S., Morris, J., Woodward, Y., Baldwin, R., Proctor, R., Tarrier, N.,
 M. R., Hoffman, J. M., Collaborative care for pain, depression and physical inactivity in an outpatient SCI clinic: The sci-care study, Archives of Physical Medicine and Rehabilitation, 97, e78-e79, 2016 Brunelli, S., Morone, G., Iosa, M., Ciotti, C., De Giorgi, R., Foti, C., Traballesi, M., Efficacy of progressive muscle relaxation, mental imagery, and phantom exercise training on phantom limb: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 96, 181-187, 2015 Burns, A., Banerjee, S., Morris, J., Woodward, Y., Baldwin, R., Proctor, R., Tarrier, N.,
 Giorgi, R., Foti, C., Traballesi, M., Efficacy of progressive muscle relaxation, mental imagery, and phantom exercise training on phantom limb: a randomized controlled trial, Archives of Physical Medicine and Rehabilitation, 96, 181-187, 2015 Burns, A., Banerjee, S., Morris, J., Woodward, Y., Baldwin, R., Proctor, R., Tarrier, N.,
Y., Baldwin, R., Proctor, R., Tarrier, N., prevention of depression in hip fracture patients.
Pendleton, N., Sutherland, D., Andrew, G., Horan, M., Treatment and prevention of depression after surgery for hip fracture in older people: randomized, controlled trials, J Am Geriatr Soc, 55, 75-80, 2007
Carrougher, G. J., Brych, S. B., Pham, T. N., Mandell, S. P., Gibran, N. S., An Intervention Bundle to Facilitate Return to Work for Burn- Injured Workers: Report from a Burn Model System Investigation, Journal of Burn Care and Research, 38, e70-e78, 2017
Castillo, R. C., Wegener, S. T., Newell, M. Z., Carlini, A. R., Bradford, A. N., Heins, S. E., Wysocki, E., Pollak, A. N., Teter, H., Mackenzie, E. J., Improving outcomes at Level I trauma centers: An early evaluation of the trauma survivors network, Journal of Trauma and Acute Care Surgery, 74, 1534-1540, 2013
Chertok, N. V., Dolgova, V. I., Mamylina, N. V., Bajguzhin, P. A., Kryzhanovskaya, N. V., The effect of rehabilitation technology on quality of life of middle-age women afterupper limb trauma, International Journal of Pharmacy and
Technology, 8, 27186-27195, 2016

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Study Ortuno, R., Frawley, N., The activity and	
outcomes of an off-site geriatric rehabilitation unit: A 1-year study, Irish Journal of Medical Science, 182, S243, 2013	
Craig, A. R., Hancock, K., Dickson, H., Chang, E., Long-term psychological outcomes in spinal cord injured persons: results of a controlled trial using cognitive behavior therapy, Archives of Physical Medicine and Rehabilitation, 78, 33-8, 1997	Non-randomised study, n<100 per treatment arm.
Crotty, M., Unroe, K., Cameron, I. D., Miller, M., Ramirez, G., Couzner, L., Rehabilitation interventions for improving physical and psychosocial functioning after hip fracture in older people, Cochrane Database of Systematic Reviews, 2010	Systematic review. References checked for possible studies - 5 were identified.
Curtis, K., Hitzig, S. L., Bechsgaard, G., Stoliker, C., Alton, C., Saunders, N., Leong, N., Katz, J., Evaluation of a specialized yoga program for persons with a spinal cord injury: A pilot randomized controlled trial, Journal of Pain Research, 10, 999-1017, 2017	Intervention not in PICO - physical yoga programme
Daneshpajooh, L., Najafi Ghezeljeh, T., Haghani, H., Comparison of the effects of inhalation aromatherapy using Damask Rose aroma and the Benson relaxation technique in burn patients: A randomized clinical trial, Burns, 45, 1205-1214, 2019	Outcome not in PICO - pain anxiety
De Silva, Mary, Maclachlan, Malcolm, Devane, Declan, Desmond, Deirdre, Gallagher, Pamela, Schnyder, Ulrich, Brennan, Muireann, Patel, Vikram, Psychosocial interventions for the prevention of disability following traumatic physical injury, The Cochrane database of systematic reviews, CD006422, 2009	Systematic review, included studies checked for relevance and added to review individually when relevant
Dennis, B. M., Nolan, T. L., Brown, C. E., Vogel, R. L., Flowers, K. A., Ashley, D. W., Nakayama, D. K., Using a checklist to improve family communication in trauma care, American Surgeon, 82, 59-64, 2016	Paper unavailable.
Dorsey, L., Spinal cord injury interdisciplinary education, Journal for specialists in pediatric nursing : JSPN, 10, 86-89, 2005	Narrative review
Dorstyn, D., Mathias, J., Denson, L., Efficacy of cognitive behavior therapy for the management of psychological outcomes following spinal cord injury: a meta-analysis, Journal of health psychology, 16, 374-391, 2011	Systematic review. References checked for possible studies - 1 was identified.
Dorstyn, D., Roberts, R., Murphy, G., Craig, A., Kneebone, I., Stewart, P., Chur-Hansen, A., Marshall, R., Clark, J., Migliorini, C., Work and SCI: a pilot randomized controlled study of an online resource for job-seekers with spinal cord dysfunction, Spinal Cord, 57, 221a 228, 2019	Intervention not in PICO - online resource targeted to jobâ seekers with spinal cord injury or disorder
Duchnick, J. J., Letsch, E. A., Curtiss, G., Coping effectiveness training during acute rehabilitation of spinal cord injury/dysfunction: a	Comparison not in PICO - coping effectiveness training versus supportive group therapy. Historical non-randomised study used for

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
randomized clinical trial, Rehabil Psychol, 54, 123-32, 2009	secondary analysis, N >100 per arm.
Dyck, D. G., Weeks, D. L., Gross, S., Lederhos Smith, C., Lott, H. A., Wallace, A. J., Wood, S. M., Comparison of two psycho-educational family group interventions for improving psycho- social outcomes in persons with spinal cord injury and their caregivers: a randomized- controlled trial of multi-family group intervention versus an active education control condition, BMC psychology, 4, 40, 2016	Study protocol
Elbers, N. A., Akkermans, A. J., Cuijpers, P., Bruinvels, D. J., Empowerment of personal injury victims through the internet: design of a randomized controlled trial, Trials, 12, 29, 2011	Study protocol
Elbers, N. A., Akkermans, A. J., Cuijpers, P., Bruinvels, D. J., Effectiveness of a web-based intervention for injured claimants: a randomized controlled trial, Trials, 14, 227, 2013	Population not in PICO - 42% were hospitalised (after traffic accident).
Elinge, Eva, Löfgren, Britta, Gagerman, Eva, Nyberg, Lars, A Group Learning Programme for Old People with Hip Fracture: A Randomized Study, Scandinavian Journal of Occupational Therapy, 10, 27-33, 2003	Population not in PICO – over 18 years old
Ferguson, S. L., Voll, K. V., Burn Pain and Anxiety: The Use of Music Relaxation during Rehabilitation, Journal of Burn Care and Rehabilitation, 25, 8-14, 2004	Outcome not in PICO - change in pain and anxiety during relaxation intervention
Finn, Sacha B., Perry, Briana N., Clasing, Jay E., Walters, Lisa S., Jarzombek, Sandra L., Curran, Sean, Rouhanian, Minoo, Keszler, Mary S., Hussey-Andersen, Lindsay K., Weeks, Sharon R., Pasquina, Paul F., Tsao, Jack W., A Randomized, Controlled Trial of Mirror Therapy for Upper Extremity Phantom Limb Pain in Male Amputees, Frontiers in neurology, 8, 267, 2017	Intervention not in PICO – mirror therapy
Flinn, N., Storm, K., Lower-extremity dressing for persons with quadriplegia: What are the long- term outcomes?, Archives of Physical Medicine and Rehabilitation, 91, e28, 2010	Conference abstract
Fonte, N., Urological care of the spinal cord- injured patient, Journal of wound, ostomy, and continence nursing : official publication of The Wound, Ostomy and Continence Nurses Society / WOCN, 35, 2008	Narrative review
Forchheimer, Martin, Tate, Denise G., Enhancing community re-integration following spinal cord injury, NeuroRehabilitation, 19, 103- 13, 2004	Non-randomised study, n<100 per treatment arm.
Foy, T., Perritt, G., Thimmaiah, D., Heisler, L., Offutt, J. L., Cantoni, K., Hseih, C. H., Gassaway, J., Ozelie, R., Backus, D., Occupational therapy treatment time during inpatient spinal cord injury rehabilitation, Journal of Spinal Cord Medicine, 34, 162-175, 2011	Comparison not in PICO - different levels of SCI injury
Foy, Teresa, Perritt, Ginger, Thimmaiah, Deepa, Heisler, Lauren, Offutt, Jennifer Lookingbill,	Comparison not in PICO - different levels of SCI

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Study Cantoni, Kara, Hseih, Ching-Hui, Gassaway, Julie, Ozelie, Rebecca, Backus, Deborah, The SCIRehab project: treatment time spent in SCI rehabilitation. Occupational therapy treatment time during inpatient spinal cord injury rehabilitation, The journal of spinal cord medicine, 34, 162-75, 2011	injury
Frenkel, L., A support group for parents of burned children: A South African Children's Hospital Burns Unit, Burns, 34, 565-569, 2008	Qualitative study
Frisbee, Kathleen L., Variations in the Use of mHealth Tools: The VA Mobile Health Study, JMIR mHealth and uHealth, 4, e89, 2016	Population not in PICO - mixture of mental and physical trauma with no way of differentiating in analysis
Frosch, E., Lewandowski, L., Psychological issues associated with acute physical injury: After the pediatric emergency department, International Review of Psychiatry, 10, 216-223, 1998	Narrative review
Galea, M. P., Levinger, P., Lythgo, N., Cimoli, C., Weller, R., Tully, E., McMeeken, J., Westh, R., A targeted home- and center-based exercise program for people after total hip replacement: a randomized clinical trial, Archives of Physical Medicine and Rehabilitation, 89, 1442â 1447, 2008	Intervention not in PICO - physical exercise intervention
Gargaro, J., Warren, C., Boschen, K., Perceived barriers and facilitators to community reintegration after spinal cord injury: A critical review of the literature, Critical Reviews in Physical and Rehabilitation Medicine, 25, 101- 141, 2013	Narrative review
Gassaway, J., Anziano, P., Peer-supported self- directed care optimizes successful community transition after catastrophic injury, Journal of Spinal Cord Medicine, 39, 562, 2016	Conference abstract
Gassaway, J., Jones, M. L., Sweatman, W. M., Young, T., Peer-led, transformative learning approaches increase classroom engagement in care self-management classes during inpatient rehabilitation of individuals with spinal cord injury, Journal of Spinal Cord Medicine, 42, 338- 346, 2019	Non-randomised study, n<100 per treatment arm.
Gassner, K., Einsiedel, T., Linke, M., Görlich, P., Mayer, J., Does mental training improve learning to walk with an above-knee prosthesis?, Der Orthopade, 36, 673â 678, 2007	German language paper
Gernigon, C., Pereira Dias, C., Riou, F., Briki, W., Ninot, G., Reference system of competence and engagement in adapted physical activities of people with recent spinal cord injury, Disability and Rehabilitation, 37, 2192-2196, 2015	Non-randomised study, n<100 per treatment arm.
Ghazi, C., Nyland, J., Whaley, R., Rogers, T., Wera, J., Henzman, C., Social cognitive or learning theory use to improve self-efficacy in musculoskeletal rehabilitation: A systematic review and meta-analysis, Physiotherapy Theory and Practice, 34, 495-504, 2018	Systematic review - studies check for possible inclusions. None were identified.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Gill, M., Psychosocial implications of spinal cord	Narrative reveiw
injury, Critical care nursing quarterly, 22, 1-7, 1999	
Giummarra, M. J., Lennox, A., Dali, G., Costa, B., Gabbe, B. J., Early psychological interventions for posttraumatic stress, depression and anxiety after traumatic injury: A systematic review and meta-analysis, Clinical Psychology Review, 62, 11-36, 2018	Systematic review - studies checked for possible inclusion. None were identified.
Goodwin-Wilson, C., Watkins, M., Gardner- Elahi, C., Developing evidence-based process maps for spinal cord injury rehabilitation, Spinal Cord, 48, 122-127, 2010	No comparative data
Goudie, S., Dixon, D., McMillan, G., Ring, D., McQueen, M., Is use of a psychological workbook associated with improved disabilities of the arm, shoulder and hand scores in patients with distal radius fracture?, Clinical Orthopaedics and Related Research, 476, 832- 845, 2018	Population not in PICO - isolated distal radial fracture, not complex rehabilitation needs
Griffin, Leah, Sifuentes, Mikaela M., Retrospective Payor Claims Analysis of Patients Receiving Outpatient Negative Pressure Wound Therapy With Remote Therapy Monitoring, Wounds : a compendium of clinical research and practice, 31, E9-E11, 2019	Paper unavailable.
Gual, N., Calle, A., Casino, J., Lusilla, P., Gual, A., Inzitari, M., Feasibility study of motivational interviewing to improve rehabilitation in an intermediate care hospital, European Geriatric Medicine, 6, S107, 2015	Conference abstract
Guest, R., Tran, Y., Gopinath, B., Cameron, I. D., Craig, A., Psychological distress following a motor vehicle crash: Preliminary results of a randomised controlled trial investigating brief psychological interventions, Trials, 19, 343, 2018	Population not included in PICO - exclusion criteria includes presence of severe injuries
Guihan, M., Holmes, S. A., Bombardier, C. H., Ehde, D. M., Rapacki, L. M., Self-management to prevent ulcers in spinal cord injury, Journal of Spinal Cord Medicine, 36, 520, 2013	Conference abstract
Gursky, Barbara, Kestler, Lisa P., Lewis, Michael, Psychosocial intervention on procedure-related distress in children being treated for laceration repair, Journal of developmental and behavioral pediatrics : JDBP, 31, 217-22, 2010	Non-randomised study, n<100 per treatment arm.
Haik, J., Tessone, A., Nota, A., Mendes, D., Raz, L., Goldan, O., Regev, E., Winkler, E., Mor, E., Orenstein, A., Hollombe, I., The use of video capture virtual reality in burn rehabilitation: The possibilities, Journal of Burn Care and Research, 27, 195-197, 2006	Narrative description of intervention development
Hall, A. B., Englert, Z., Hanseman, D., Klein, A., Self-efficacy improvement for performance of trauma-related skills due to a military-civilian partnership, American Surgeon, 84, E505-E507,	Paper unavailable.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
2018 Handoll, H. H. G., Brorson, S., Interventions for	Systematic review - studies checked for possible
treating proximal humeral fractures in adults, Cochrane Database of Systematic Reviews, 2015	inclusion. None were identified.
Harris, S. R., Psychogenic movement disorders in children and adolescents: an update, European Journal of Pediatrics, 178, 581-585, 2019	Narrative review
Harvey, C., Dixon, M., Padberg, N., Support group for families of trauma patients: a unique approach, Critical care nurse, 15, 59-63, 1995	Narrative review
Hashemi, Fatemeh, Rahimi Dolatabad, Fatemeh, Yektatalab, Shahrzad, Ayaz, Mehdi, Zare, Najaf, Mansouri, Parisa, Effect of Orem Self-Care Program on the Life Quality of Burn Patients Referred to Ghotb-al-Din-e-Shirazi Burn Center, Shiraz, Iran: A Randomized Controlled Trial, International journal of community based nursing and midwifery, 2, 40-50, 2014	Comparison not in PICO - no intervention rather than standard rehabilitation care.
Hearn, J. H., Finlay, K. A., Internet-delivered mindfulness for people with depression and chronic pain following spinal cord injury: a randomized, controlled feasibility trial, Spinal Cord, 56, 750-761, 2018	Population not in PICO - depression and chronic pain
Highsmith, M. Jason, Kahle, Jason T., Knight, Molly, Olk-Szost, Ayla, Boyd, Melinda, Miro, Rebecca M., Delivery of cosmetic covers to persons with transtibial and transfemoral amputations in an outpatient prosthetic practice, Prosthetics and Orthotics International, 40, 343- 9, 2016	No comparative data
Hill, Keith D., Hunter, Susan W., Batchelor, Frances A., Cavalheri, Vinicius, Burton, Elissa, Individualized home-based exercise programs for older people to reduce falls and improve physical performance: A systematic review and meta-analysis, Maturitas, 82, 72-84, 2015	Systematic review - studies checked for possible inclusion. None were identified.
Hocaloski, S., Elliott, S., Brotto, L., Breckon, E., McBride, K., A mindfulness psychoeducational group intervention targeting sexual adjustment for women with multiple sclerosis or spinal cord injury: A pilot study, Journal of Spinal Cord Medicine, 39, 583, 2016	Conference abstract
Holmes, A., Hodgins, G., Adey, S., Menzel, S., Danne, P., Kossmann, T., Judd, F., Trial of interpersonal counselling after major physical trauma, Australian and New Zealand journal of psychiatry, 41, 926-933, 2007	Population not in PICO – over 18 years old
Holstege, M. S., Caljouw, M. A. A., Van Balen, R., Gussekloo, J., Achterberg, W. P., Effectiveness of innovations in geriatric rehabilitation. The SINGER Study, European Geriatric Medicine, 4, S109-S110, 2013	Conference abstract
Hossain, M. S., Harvey, L. A., Rahman, M. A., Muldoon, S., Bowden, J. L., Islam, M. S., Jan, S., Taylor, V., Cameron, I. D., Chhabra, H. S.,	Published protocol, recruitment still ongoing.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Lindley, R. I., Biering-Sorensen, F., Li, Q., Dhakshinamurthy, M., Herbert, R. D., Community-based InterVentions to prevent serious Complications (CIVIC) following spinal cord injury in Bangladesh: protocol of a randomised controlled trial, BMJ Open, 6, e010350, 2016	
Houlihan, B. V., Brody, M., Everhart-Skeels, S., Pernigotti, D., Burnett, S., Zazula, J., Green, C., Hasiotis, S., Belliveau, T., Seetharama, S., Rosenblum, D., Jette, A., Randomized Trial of a Peer-Led, Telephone-Based Empowerment Intervention for Persons With Chronic Spinal Cord Injury Improves Health Self-Management, Archives of Physical Medicine and Rehabilitation, 98, 1067, 2017	Analyses and outcomes not in PICO - change in Patient Activation Measure. Quality of life and patient satisfaction reported only as difference in change scores between groups.
Houlihan, B. V., Jette, A., Friedman, R. H., Paasche-Orlow, M., Ni, P., Wierbicky, J., Williams, K., Ducharme, S., Zazula, J., Cuevas, P., et al.,, A pilot study of a telehealth intervention for persons with spinal cord dysfunction, Spinal Cord, 51, 715â 720, 2013	Intervention not in PICO - telehealth intervention targeted towards pressure ulcers, depression and healthcare utilisation.
Houlihan, B., Brody, M., Everhart-Skeels, S., Pernigotti, D., Sam, J. Z., Hasiotis, B. S., Green, C., Seetharama, S., Belliveau, T., Rosenblum, D., Jette, A., "my care my call," a peer-led, telephone-based intervention for persons with spinal cord injury improves self-management behaviors, Archives of Physical Medicine and Rehabilitation, 97, e23, 2016	Conference abstract
Houlihan, B., Brody, M., Plant, A., Skeels, S. E., Zazula, J., Pernigotti, D., Green, C., Hasiotis, S., Jette, A., Health care self-advocacy strategies for negotiating health care environments: Analysis of recommendations by satisfed consumers with SCI and SCI practitioners, Topics in Spinal Cord Injury Rehabilitation, 22, 13-26, 2016	Qualitative study
Houlihan, B., Brody, M., Skeels, S., Pernigotti, D., Zazula, J., Burnett, S., Green, C., Seetharama, S., Hasiotis, S., Belliveau, T., Rosenblum, D., Jette, A., RCT of peer-led phone-based empowerment intervention for persons with chronic spinal cord injury improves health self-management, Archives of Physical Medicine and Rehabilitation, 98, e152, 2017	Conference abstract
Huang, T. T., Liang, S. H., A randomized clinical trial of the effectiveness of a discharge planning intervention in hospitalized elders with hip fracture due to falling, J Clin Nurs, 14, 1193-201, 2005	Intervention not in PICO - discharge planning programme.
Hughes, R. B., Robinson-Whelen, S., Taylor, H. B., Hall, J. W., Stress self-management: an intervention for women with physical disabilities, Women's health issues, 16, 389-99, 2006	Population mixed between trauma and non- trauma with no way of determining
Huston, T., Hollicky, R., Chase, T., Cuthbert, J., Charlifue, S., Enhancing self-efficacy: The re- inventing yourself after SCI project, Journal of	Conference abstract

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Spinal Cord Medicine, 36, 520-521, 2013	
Isaacson, B. M., Weeks, S. R., Pasquina, P. F., Webster, J. B., Beck, J. P., Bloebaum, R. D., The road to recovery and rehabilitation for injured service members with limb loss: a focus on Iraq and Afghanistan, U.S. Army Medical Department journal, 31-36, 2010	Paper unavailable.
Jayasinghe, N., Moallem, I., Wyka, K., Bruce, M., Difede, J. A., Addressing anxiety with exposure-based cognitive-behavioral therapy and relaxation training in older adults after medical falls, American Journal of Geriatric Psychiatry, 23, S152, 2015	Conference abstract
Jensen, M. P., Barber, J., Romano, J. M., Hanley, M. A., Raichle, K. A., Molton, I. R., Engel, J. M., Osborne, T. L., Stoelb, B. L., Cardenas, D. D., Patterson, D. R., Effects of self-hypnosis training and EMG biofeedback relaxation training on chronic pain in persons with spinal-cord injury, International Journal of Clinical and Experimental Hypnosis, 57, 239- 268, 2009	Specific pain management interventions
Johnson, K. A., Klaas, S. J., The changing nature of play: Implications for pediatric spinal cord injury, Journal of Spinal Cord Medicine, 30, S71-S75, 2007	Narrative review
Johnson, S., Increase burn patient and family satisfaction with simple diagram, Journal of Burn Care and Research, 36, S229, 2015	Conference abstract
Jones, C., Perry, L., Bennett, B., Wickremasinghe, I. M., Addressing elevated blood pressures in spinal cord injury using mindfulness-based exercises, Journal of Spinal Cord Medicine, 37, 442-443, 2014	Conference abstract
Kamal, A. M., Fathy, H., Psychiatric assessment of disfigured burn patients following cognitive behavioral therapy program, Egyptian Journal of Neurology, Psychiatry and Neurosurgery, 50, 19-24, 2013	Paper unavailable.
Kane, F. M., Brodie, E. E., Coull, A., Coyne, L., Howd, A., Milne, A., Niven, C. C., Robbins, R., The analgesic effect of odour and music upon dressing change, British journal of nursing (Mark Allen Publishing), 13, S4â 12, 2004	Specific pain management interventions
Kellezi, B., Beckett, K., Earthy, S., Barnes, J., Sleney, J., Clarkson, J., Regel, S., Jones, T., Kendrick, D., Understanding and meeting information needs following unintentional injury: comparing the accounts of patients, carers and service providers, Injury, 46, 564-71, 2015	Qualitative study
Khanjari, Sedigheh, Tajik, Zahra, Haghani, Hamid, The effect of family-centered education on the quality of life of adolescents with spinal cord injuries, Journal of family medicine and primary care, 8, 711-716, 2019	Non-randomised study, n<100 per treatment arm.
King, C., Kennedy, P., Coping effectiveness training for people with spinal cord injury:	Non-randomised study, n<100 per treatment

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	Dessen for Evolution
Study preliminary results of a controlled trial, The	Reason for Exclusion arm.
British journal of clinical psychology, 38 (Pt 1), 5-14, 1999	ann.
 Kooijmans, H., Post, M. W. M., Stam, H. J., van der Woude, L. H. V., Spijkerman, D. C. M., Snoek, G. J., Bongers-Janssen, H. M. H., van Koppenhagen, C. F., Twisk, J. W., Bussmann, J. B. J., Effectiveness of a Self-Management Intervention to Promote an Active Lifestyle in Persons With Long-Term Spinal Cord Injury: The HABITS Randomized Clinical Trial, Neurorehabilitation and Neural Repair, 31, 991- 1004, 2017 	Population not in PICO – over 18 years old
Kono, Taro, Groff, William Frederick, Sakurai, Hiroyuki, Yamaki, Takashi, Soejima, Kazukata, Nozaki, Motohiro, Treatment of traumatic scars using plasma skin regeneration (PSR) system, Lasers in Surgery and Medicine, 41, 128-30, 2009	No comparative data
Konstantatos, A. H., Angliss, M., Costello, V., Cleland, H., Stafrace, S., Predicting the effectiveness of virtual reality relaxation on pain and anxiety when added to PCA morphine in patients having burns dressings changes, Burns, 35, 491-499, 2009	Specific pain management interventions
Kooijmans, H., Post, M. W., van der Woude, L. H., de Groot, S., Stam, H. J., Bussmann, J. B., Randomized controlled trial of a self- management intervention in persons with spinal cord injury: design of the HABITS (Healthy Active Behavioural Intervention in SCI) study, Disability and Rehabilitation, 35, 1111-1118, 2013	Published protocol for included study (Kooijmans 2017)
Kramer, Didier N., Landolt, Markus A., Early psychological intervention in accidentally injured children ages 2-16: a randomized controlled trial, European Journal of Psychotraumatology, 5, 2014	Population not in PICO - individuals at risk for development of PTSD
Krichbaum, K., GAPN postacute care coordination improves hip fracture outcomes, West J Nurs Res, 29, 523-44, 2007	Population not in PICO - acute hip fracture patients without chronic rehabilitation needs.
Larroque, C. M., Abrams, A. N., Psychotherapy techniques for treating the medically ill or injured child, Journal of the American Academy of Child and Adolescent Psychiatry, 56, S117, 2017	Conference abstract
Lebon, Florent, Guillot, Aymeric, Collet, Christian, Badia, Binkley Bodian Christakou Christakou Cohen Cramer Cupal Decety Derscheid Dowling Drechsler Driediger Ekblom Evans Green Guillot Hale Heil Hermens Hoher Holmes Hortobagyi Hakkinen levleva Jeannerod Kaneko Kosslyn Law Liepert Lotze Louis Milne Mizner Moseley Moseley Newsom Ranganathan Ranganathan Richardson Roos Rushall Sordoni Sordoni Stinear Taylor Watson Yeung Yue Zijdewind, Increased muscle activation following motor imagery during the rehabilitation of the anterior cruciate ligament, Applied	Population not in PICO - do not get admitted to hospital with ligament tear.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Psychophysiology and Biofeedback, 37, 45-51, 2012	
Li, E. J. Q., Li-Tsang, C. W. P., Lam, C. S., Hui, K. Y. L., Chan, C. C. H., The effect of a "training on work readiness" program for workers with musculoskeletal injuries: A randomized control trial (RCT) study, Journal of Occupational Rehabilitation, 16, 529-541, 2006	Intervention not in PICO - 'Return to Work' intervention, crosses over with RTW NICE guideline.
Li, Yan, Bressington, Daniel, Chien, Wai Tong, Systematic Review of Psychosocial Interventions for People With Spinal Cord Injury During Inpatient Rehabilitation: Implications for Evidence-Based Practice, Worldviews on evidence-based nursing, 14, 499-506, 2017	Systematic review - studies checked for possible inclusion. One was identified.
Li, Yan, Bressington, Daniel, Chien, Wai-Tong, Pilot evaluation of a coping-oriented supportive program for people with spinal cord injury during inpatient rehabilitation, Disability and Rehabilitation, 41, 182-190, 2019	Non-randomised study, n<100 per treatment arm.
Lin, Pi-Chu, Wang, Ching-Hui, Chen, Chyang- Shiong, Liao, Li-Ping, Kao, Shu-Fen, Wu, Heng- Fei, Birmingham, Bull Chang Cooper Dai Dai Frank-Stromborg Gullberg Haddock Holbrook Houghton Liang Lin Lin Lin Magaziner Magaziner Michaels Naylor Naylor Naylor Pan Pasco Sambrook Spilker Strohmyer Theobald Wang Wang Ware Williams, To evaluate the effectiveness of a discharge-planning programme for hip fracture patients, Journal of Clinical Nursing, 18, 1632-1639, 2009	Intervention not in PICO - discharge-planning programme
Littleton, S. M., Hughes, D. C., Gopinath, B., Robinson, B. J., Poustie, S. J., Smith, P. N., Cameron, I. D., The health status of people claiming compensation for musculoskeletal injuries following road traffic crashes is not altered by an early intervention programme: A comparative study, Injury, 45, 1493-1499, 2014	Non-randomised study, n<100 per treatment arm.
London, M., Motivating the back injury patient, Rehab management, 12, 46-81, 1999	Narrative review
Longabaugh, R., Woolard, R. F., Nirenberg, T. D., Minugh, A. P., Becker, B., Clifford, P. R., Carty, K., Sparadeo, F., Gogineni, A., Evaluating the effects of a brief motivational intervention for injured drinkers in the emergency department, Journal of Studies on Alcohol, 62, 806-816, 2001	Population not in PICO - hazardous or harmful drinkers
MacGillivray, M. K., Mortenson, W. B., Sadeghi, M., Mills, P. B., Adams, J., Sawatzky, B. J., Implementing a self-management mobile app for spinal cord injury during inpatient rehabilitation and following community discharge: A feasibility study, Journal of Spinal Cord Medicine, 2019	No comparative data
Mackay, J., Charles, S. T., Kemp, B., Heckhausen, J., Goal striving and maladaptive coping in adults living with spinal cord injury: associations with affective well-being, Journal of aging and health, 23, 158-176, 2011	No comparative data

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Maddern, L. H., Cadogan, J. C., Emerson, M. P.,	No comparative data
'Outlook': A psychological service for children with a different appearance, Clinical Child Psychology and Psychiatry, 11, 431-443, 2006	
Magia, F., Bhise, A., Prabhakar, M., Shukla, Y., Effect of pranayama (yogic breathing) on lung function in traumatic thoracic spinal cord injury patients: An interventional study, Physiotherapy (United Kingdom), 101, eS927, 2015	Conference abstract
Magill, M., Apodaca, T., The route to change: Within-session predictors of Change Plan completion in a motivational interview, Alcoholism: Clinical and Experimental Research, 33, 112A, 2009	Conference abstract
Magill, M., Apodaca, T. R., An exploratory principal component analysis of the Motivational Interviewing Skill code: What do therapists and clients do in mi sessions?, Alcoholism: Clinical and Experimental Research, 34, 229A, 2010	Conference abstract
Mamashli, Leila, Mohaddes Ardebili, Fatemeh, Bozorgnejad, Mehri, Najafi Ghezeljeh, Tahereh, Manafi, Farzad, The Effect of Self-Care Compact Disk-Based Instruction Program on Physical Performance and Quality of Life of Patients with Burn At-Dismissal, World journal of plastic surgery, 8, 25-32, 2019	Comparison not in PICO - standard discharge instructions
Manzone, M. G., Mastronardi, L., Aleotti, S., Pontini, I., Massazza, G., Integration of psychological intervention to trauma patients and their family in medical care, Early Intervention in Psychiatry, 10, 216, 2016	Conference abstract
Marsac, M. L., Kassam-Adams, N., Hildenbrand, A. K., Kohser, K. L., Winston, F. K., After the injury: initial evaluation of a web-based intervention for parents of injured children, Health Education Research, 26, 1-12, 2011	Non-randomised study, n<100 per treatment arm.
Martin, G., Swannell, S., Mill, J., Mott, J., Evans, J., Frederiksen, N., Hilder, M., Kimble, R., Spray on skin improves psychosocial functioning in pediatric burns patients: A randomized controlled trial, Burns, 34, 498-504, 2008	Analyses and outcomes not in PICO - family and behavioural functioning. Satisfaction measured but not reported by intervention/control.
Martin-Herz, S. P., Thurber, C. A., Patterson, D. R., Psychological principles of burn wound pain in children. II: Treatment applications, The Journal of burn care & rehabilitation, 21, 458-457, 2000	Narrative review
McGilton, K. S., Davis, A. M., Naglie, G., Mahomed, N., Flannery, J., Jaglal, S., Cott, C., Stewart, S., Evaluation of patient-centered rehabilitation model targeting older persons with a hip fracture, including those with cognitive impairment, BMC geriatrics, 13, 136, 2013	Non-randomised study, n<100 per treatment arm.
Meade, M. A., Trumpower, B., Forchheimer, M., Diponio, L., Development and feasibility of health mechanics: A self-management program for individuals with spinal cord injury, Topics in Spinal Cord Injury Rehabilitation, 22, 121-134,	Intervention and comparison not included in PICO - not standard rehabilitation care

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study 2016	Reason for Exclusion
Meade, M. A., Wilson, C., Issues of implementation and feasibility of an in-person, individually administered self-management intervention for adults with spinal cord injury, Journal of Spinal Cord Medicine, 36, 514-515, 2013	Conference abstract
Mello, M. J., Baird, J., Lee, C., Strezsak, V., French, M. T., Longabaugh, R., A Randomized Controlled Trial of a Telephone Intervention for Alcohol Misuse with Injured Emergency Department Patients, Annals of Emergency Medicine, 67, 263-275, 2016	Outcomes not in PICO - past 30-day alcohol use at 12 months, injuries and alcohol-related injuries, alcohol-related negative consequences, and impaired driving frequency.
Mello, M. J., Baird, J., Strezsak, V., Lee, C., Longabaugh, R., A telephone intervention for risky alcohol use with injured emergency department patients, Annals of Emergency Medicine, 66, S104-S105, 2015	Conference abstract
Mercier, H. W., Ni, P., Houlihan, B. V., Jette, A. M., Differential Impact and Use of a Telehealth Intervention by Persons with MS or SCI, Am J Phys Med Rehabil, 94, 987-99, 2015	Population not in PICO – over 18 years old
Millikan, J. S., On the other side of the door, The Journal of trauma, 55, 1007-1013, 2003	Editorial
Mohaddes Ardebili, Fatemeh, Najafi Ghezeljeh, Tahereh, Bozorgnejad, Mehri, Zarei, Mohammadreza, Ghorbani, Hooman, Manafi, Farzad, Effect of Multimedia Self-Care Education on Quality of Life in Burn Patients, World journal of plastic surgery, 6, 292-297, 2017	Population not in PICO – over 18 years old
Mohammadi Fakhar, F., Rafii, F., Jamshidi Orak, R., The effect of jaw relaxation on pain anxiety during burn dressings: Randomised clinical trial, Burns, 39, 61-67, 2013	Outcome not in PICO - pain anxiety
Morlett-Paredes, A., Perrin, P. B., Olivera, S. L., Rogers, H. L., Perdomo, J. L., Arango, J. A., Arango-Lasprilla, J. C., With a little help from my friends: social support and mental health in SCI caregivers from Neiva, Colombia, Neurorehabilitation, 35, 841-9, 2014	Non-comparative study
Moseley, G. Lorimer, Gallace, Alberto, Spence, Charles, Is mirror therapy all it is cracked up to be? Current evidence and future directions, Pain, 138, 7-10, 2008	Narrative review
Mullen, J., McKechnie, K., Niedzwecki, C., Baize, C., Gammon, S., Giovannetti, B., Lathem, P., Leger, K. L., Vakharia, M., Wirt, Z., Young, A., Stoplight mobility alert system (SMAS): Communication of mobility status for falls prevention, Archives of Physical Medicine and Rehabilitation, 96, e34, 2015	Conference abstract
Murray, K., Corney, J., Moore-Millar, K., Cairns, N., Extending the life and improving the appearance of cosmetic foam covers for people with trans-femoral amputations, Prosthetics and	Conference abstract

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study Orthotics International, 39, 198, 2015	Reason for Exclusion
Naglie, G., Tansey, C., Kirkland, J. L., Ogilvie- Harris, D. J., Detsky, A. S., Etchells, E., Tomlinson, G., O'Rourke, K., Goldlist, B., Interdisciplinary inpatient care for elderly people with hip fracture: A randomized controlled trial, CMAJ, 167, 25-32, 2002	Intervention not in PICO - interdisciplinary care
Najafi Ghezeljeh, T., Mohades Ardebili, F., Rafii, F., The effects of massage and music on pain, anxiety and relaxation in burn patients: Randomized controlled clinical trial, Burns : journal of the International Society for Burn Injuries, 43, 1034-1043, 2017	Outcomes not in PICO - very short term effects (immediately after intervention)
Nanney, John T., Conrad, Erich J., Reuther, Erin T., Wamser-Nanney, Rachel A., McCloskey, Michael, Constans, Joseph I., Motivational Interviewing for Victims of Armed Community Violence: A Nonexperimental Pilot Feasibility Study, Psychology of violence, 8, 259-268, 2018	Non-randomised study, n<100 per treatment arm.
Newman, S. D., Andrews, J. O., Toatley, S. L., Rodgers, M. D., Epperly, D., Gillenwater, G., A peer navigation intervention for individuals with spinal cord injury, Journal of Spinal Cord Medicine, 37, 439-440, 2014	Conference abstract
Nooijen, C. F., Stam, H. J., Bergen, M. P., Bongers-Janssen, H. M., Valent, L., van Langeveld, S., Twisk, J., van den Berg-Emons, R. J., A behavioural intervention increases physical activity in people with subacute spinal cord injury: a randomised trial, Journal of physiotherapy, 62, 35-41, 2016	Population not in PICO – over 18 years old
Nooijen, C. F., Stam, H. J., Schoenmakers, I., Sluis, T. A., Post, M. W., Twisk, J. W., van den Berg-Emons, R. J., Working mechanisms of a behavioural intervention promoting physical activity in persons with subacute spinal cord injury, Journal of Rehabilitation Medicine, 48, 583-588, 2016	Population not in PICO – over 18 years old
Nooijen, C. F., Stam, H. J., Sluis, T., Valent, L., Twisk, J., van den Berg-Emons, R. J., A behavioral intervention promoting physical activity in people with subacute spinal cord injury: secondary effects on health, social participation and quality of life, Clinical Rehabilitation, 31, 772-780, 2017	Population not in PICO – over 18 years old
Noroozi, S., Mokhtariaraghi, H., Barzoki, M. H., The effectiveness of trauma-focused cognitive- behavioural therapy in the treatment of depression of divorced women in Tehran, Australasian Medical Journal, 11, 245-252, 2018	Population not in PICO - divorced women
Ogawa, Tatsuya, Omon, Kyohei, Yuda, Tomohisa, Ishigaki, Tomoya, Imai, Ryota, Ohmatsu, Satoko, Morioka, Shu, Short-term effects of goal-setting focusing on the life goal concept on subjective well-being and treatment engagement in subacute inpatients: a quasi- randomized controlled trial, Clinical	Non-randomised study, n<100 per treatment arm.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Rehabilitation, 30, 909-20, 2016 Ormhaug, S. M., Jensen, T. K., Wentzel-Larsen, T., Shirk, S. R., The therapeutic alliance in treatment of traumatized youths: Relation to outcome in a randomized clinical trial, Journal of Consulting and Clinical Psychology, 82, 52-64, 2014	Population not in PICO - traumatised youth
Oshvandi, K., Fallahinia, G. H., Azami, H., Tapak, L., The effect of music with relaxation on the patients' pain intensity due to burn dressing, Journal of Chemical and Pharmaceutical Sciences, 2016, 57-60, 2016	Intervention not in PICO - " burn care, not rehabilitation.
Oude Voshaar, Richard C., Banerjee, Sube, Horan, Mike, Baldwin, Robert, Pendleton, Neil, Proctor, Rebekah, Tarrier, Nicholas, Woodward, Yvonne, Burns, Alistair, Fear of falling more important than pain and depression for functional recovery after surgery for hip fracture in older people, Psychological Medicine, 36, 1635-45, 2006	Intervention not in PICO - cognitive behavioural therapy designed to treat depression in geriatric hip fracture patients.
Ozturk, A., Ucsular, F. D., Effectiveness of a wheelchair skills training programme for community-living users of manual wheelchairs in Turkey: a randomized controlled trial, Clin Rehabil, 25, 416-24, 2011	Population not in PICO - manual wheelchair users, not traumatic injury.
Pantera, E., Fages, P., Cristina, M. C., Coudeyre, E., Therapeutic education after amputation: Literature's review, Annals of Physical and Rehabilitation Medicine, 56, e145- e146, 2013	Conference abstract
Pantera, E., Pourtier-Piotte, C., Bensoussan, L., Coudeyre, E., Patient education after amputation: Systematic review and experts' opinions, Annals of Physical and Rehabilitation Medicine, 57, 143-158, 2014	Systematic review - studies checked for possible inclusion. None were identified.
Patterson, R. W., Bushnik, T., Burdsall, D., Wright, J., Considerations of peer support for persons with high tetraplegia, Topics in Spinal Cord Injury Rehabilitation, 10, 30-37, 2005	Narrative decription of intervention
Perkes, S. J., Bowman, J., Penkala, S., Psychological therapies for the management of co-morbid depression following a spinal cord injury: a systematic review, Journal of health psychology, 19, 1597-1612, 2014	Systematic review - references checked for possible studies. None were identified.
Peterson, Margaret G. E., Ganz, Sandy B., Allegrante, John P., Cornell, Charles N., High- Intensity Exercise Training Following Hip Fracture, Topics in Geriatric Rehabilitation, 20, 273-284, 2004	Intervention not in PICO - high intensity exercise.
Pham, C. H., Fang, M., Nager, J., Matsushima, K., Inaba, K., Kuza, C. M., The Role of Psychological Support Interventions in Trauma Patients on Mental Health Outcomes: A Systematic Review and Meta-Analysis, The journal of trauma and acute care surgery, 2019	Systematic review - studies checked for possible inclusion. None were identified.
Phillips, V. L., Vesmarovich, S., Hauber, R., Wiggers, E., Egner, A., Telehealth: reaching out	Intervention not in PICO – Individual telephone

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Posson for Evolucion
Study to newly injured spinal cord patients, Public	Reason for Exclusion and video rehabilitation education sessions
health reports (Washington, D.C. : 1974), 116 Suppl 1, 94-102, 2001	
 Pirente, N., Blum, C., Wortberg, S., Bostanci, S., Berger, E., Lefering, R., Bouillon, B., Rehm, K. E., Neugebauer, E. A., Quality of life after multiple trauma: the effect of early onset psychotherapy on quality of life in trauma patients, Langenbeck's archives of surgery / Deutsche Gesellschaft fur Chirurgie, 392, 739- 745, 2007 	Population not in PICO – over 18 years old
Pisconti, F., Santos, S. M. S., Lopes, J., Cardoso, J. R., Lavado, E. L., Cross-cultural and psychometric properties assessment of the exercise self-efficacy scale in individuals with spinal cord injury, Acta Medica Portuguesa, 30, 783-789, 2017	No comparative data
Pjanic, I., Messerli-Burgy, N., Bachmann, M. S., Siegenthaler, F., Hoffmann-Richter, U., Znoj, H., Predictors of depressed mood 12 months after injury. Contribution of self-efficacy and social support, Disability and Rehabilitation, 36, 1258- 1263, 2014	No comparative data
Plaza, A., Paratz, J., Stockton, K., Muller, M., Hoskin, B., Exercise programmes are effective and safe in a burns population: A controlled trial, Journal of Burn Care and Research, 32, S117, 2011	Conference abstract
Pol, M. C., Ter Riet, G., van Hartingsveldt, M., Krose, B., Buurman, B. M., Effectiveness of sensor monitoring in a rehabilitation programme for older patients after hip fracture: a three-arm stepped wedge randomised trial, Age and Ageing, 2019	Analyses and outcomes not in PICO
Postma, K., Haisma, J. A., Hopman, M. T., Bergen, M. P., Stam, H. J., Bussmann, J. B., Resistive inspiratory muscle training in people with spinal cord injury during inpatient rehabilitation: a randomized controlled trial, Physical Therapy, 94, 1709-1719, 2014	Intervention not in PICO - resistive inspiratory muscle training
Pourmand, Ali, Davis, Steven, Lee, Danny, Barber, Scott, Sikka, Neal, Emerging Utility of Virtual Reality as a Multidisciplinary Tool in Clinical Medicine, Games for health journal, 6, 263-270, 2017	Systematic review - included studies searched for possible inclusions. None were identified.
Prang, K. H., Berecki-Gisolf, J., Newnam, S., The influence of social support on healthcare service use following transport-related musculoskeletal injury, BMC health services research, 16, 310, 2016	No comparative data
Prang, K. H., Berecki-Gisolf, J., Newnam, S., Recovery from musculoskeletal injury: The role of social support following a transport accident, Health and Quality of Life Outcomes, 13, 97, 2015	No comparative data
Prensner, J. D., Yowler, C. J., Smith, L. F., Steele, A. L., Fratianne, R. B., Music therapy for	Case series

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
assistance with pain and anxiety management in burn treatment, Journal of Burn Care and Rehabilitation, 22, 83-88, 2001	
Purdue, G. F., Hunt, J. L., Burns and trauma, Problems in General Surgery, 20, 106-111, 2003	Narrative review
Quan, Judy, Managing the occupational injury case: do you manage or monitor?, Professional case management, 13, 116-7, 2008	Editorial
Rajanna, V., Vo, P., Barth, J., Mjelde, M., Grey, T., Oduola, C., Hammond, T., KinoHaptics: An Automated, Wearable, Haptic Assisted, Physio- therapeutic System for Post-surgery Rehabilitation and Self-care, Journal of Medical Systems, 40, 1-12, 2016	Non-randomised study, n<100 per treatment arm.
Ramirez, M., Toussaint, M., Woods-Jaeger, B., Harland, K., Wetjen, K., Wilgenbusch, T., Pitcher, G., Jennissen, C., Link for Injured Kids: A Patient-Centered Program of Psychological First Aid after Trauma, Pediatric Emergency Care, 33, 532-537, 2017	Qualitative study
Rintala, D. H., Garber, S. L., Friedman, J. D., Holmes, S. A., Preventing recurrent pressure ulcers in veterans with spinal cord injury: impact of a structured education and follow-up intervention, Arch Phys Med Rehabil, 89, 1429- 41, 2008	Outcomes not in PICO - pressure ulcer recurrence.
Robb, Sheri L., Nichols, Ray J., Rutan, Randi L., Bishop, Bonnie L., Parker, Jayne C., The effects of music assisted relaxation on preoperative anxiety, Journal of Music Therapy, 32, 2-21, 1995	Outcome not in PICO - operative anxiety
 Roberts, J. L., Pritchard, A. W., Williams, M., Totton, N., Morrison, V., D. In N.U, Williams, N. H., Mixed methods process evaluation of an enhanced community-based rehabilitation intervention for elderly patients with hip fracture, BMJ Open, 8 (8) (no pagination), 2018 	No quantitative data presented
Roosink, Meyke, Robitaille, Nicolas, Jackson, Philip L., Bouyer, Laurent J., Mercier, Catherine, Baumbauer, Beaumont Betker Boudreau Bouffard Bowering Decety Di Rienzo Donnelly Gustin Jackson Jeannerod Kizony Kumru Lamothe Longo Malouin Malouin Malouin Mercier Mercier Moseley Moseley Moseley Moseley Mulder Raffin Roosink Sayenko Sharp Siddall Soler Sumitani Tawashy Turner Villiger Villiger Widerstrom-Noga Witmer Zigmond Zimmerli, Interactive virtual feedback improves gait motor imagery after spinal cord injury: An exploratory study, Restorative Neurology and Neuroscience, 34, 227-235, 2016	Non-randomised study, n<100 per treatment arm.
Rottkamp, B. C., An experimental nursing study: a behavior modification approach to nursing therapeutics in body positioning of spinal cord- injured patients, Nurs Res, 25, 181-6, 1976	Date restriction, pre-1995.
Rowland, Jennifer L., White, Glen W., Wyatt, David A., Analysis of An Intervention to Reduce	Outcomes not in PICO - development of secondary conditions.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
or Prevent Secondary Conditions for People with Spinal Cord Injuries, Journal of Clinical Psychology in Medical Settings, 13, 263-271, 2006	
Rubin, E., Ostrowsky, L., Janopaul-Naylor, E., Sehgal, P., Cama, S., Tanski, E., Curtin, C., The sibling support demonstration project: A pilot study assessing feasibility, preliminary effectiveness, and participant satisfaction, Adolescent Psychiatry, 8, 48-60, 2018	Population not in PICO - psychiatric inpatients.
Ruchlin, H. S., Elkin, E. B., Allegrante, J. P., The economic impact of a multifactorial intervention to improve postoperative rehabilitation of hip fracture patients, 45, 446-52, 2001	Outcomes not in PICO - health economic outcomes only.
Rutherford, L. G., von Wenckstern, T., Trauma Information Group: A Level I Trauma Center's Integrated Approach to Family Support, Journal of trauma nursing : the official journal of the Society of Trauma Nurses, 23, 357-360, 2016	No comparative data
Ryan, C. M., Lee, A. F., Kazis, L. E., Schneider, J. C., Palmieri, T. L., Pidcock, F., Reilly, D. A., Meyer, Iii W. J., Sheridan, R. L., Tompkins, R. G., The impact of facial burns on patient reported health outcomes following burn injuries in young adults: A five year study, Journal of Burn Care and Research, 36, S94, 2015	Conference abstract
Sabino, J., Polfer, E., Tintle, S., Jessie, E., Fleming, M., Martin, B., Shashikant, M., Valerio, I. L., A decade of conflict: flap coverage options and outcomes in traumatic war-related extremity reconstruction, Plastic and Reconstructive Surgery, 135, 895-902, 2015	Intervention not in PICO - surgical reconstruction
Sathiya, K., Effect of Progressive Relaxation Therapy among Orthopaedic Trauma Patients, The Nursing journal of India, 106, 186-189, 2015	Outcome not in PICO - post traumatic stress disorder
Saw, A., Chan, C. K., Penafort, R., Sengupta, S., A simple practical protocol for care of metal- skin interface of external fixation, Medical Journal of Malaysia, 61, 2006	Paper unavailable.
Schulz, Richard, Czaja, Sara J., Lustig, Amy, Zdaniuk, Bozena, Martire, Lynn M., Perdomo, Dolores, Improving the quality of life of caregivers of persons with spinal cord injury: a randomized controlled trial, Rehabilitation Psychology, 54, 1-15, 2009	Population not in PICO – over 18 years old
Seehausen, A., Ripper, S., Germann, G., Hartmann, B., Wind, G., Renneberg, B., Efficacy of a burn-specific cognitive-behavioral group training, Burns, 41, 308-316, 2015	Non-randomised study, n<100 per treatment arm.
Seel, R. T., Douglas, J., Dennison, A. C., Heaner, S., Farris, K., Rogers, C., Specialized early treatment for persons with disorders of consciousness: program components and outcomes, Archives of Physical Medicine & RehabilitationArch Phys Med Rehabil, 94, 1908- 23, 2013	No comparative data
Shamout, S., Biardeau, X., Corcos, J.,	Systematic review - studies checked for possible

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Of which is	Dessen for Evolution
Study Campeau, L., Outcome comparison of different	Reason for Exclusion inclusion. None were identified.
approaches to self-intermittent catheterization in neurogenic patients: a systematic review, Spinal Cord, 55, 629-643, 2017	
Shepherd-Banigan, Megan E., Shapiro, Abigail, McDuffie, Jennifer R., Brancu, Mira, Sperber, Nina R., Van Houtven, Courtney H., Kosinski, Andrzej S., Mehta, Neha N., Nagi, Avishek, Williams, John W., Jr., Interventions That Support or Involve Caregivers or Families of Patients with Traumatic Injury: a Systematic Review, Journal of General Internal Medicine, 33, 1177-1186, 2018	Systematic review - studies checked for possible inclusion. None were identified.
 Shields, B. A., Brown, J. N., Aden, J. K., Salgueiro, M., Mann-Salinas, E. A., Chung, K. K., A pilot review of gradual versus goal re- initiation of enteral nutrition after burn surgery in the hemodynamically stable patient, Burns, 40, 1587-1592, 2014 	Non-randomised study, n<100 per treatment arm.
Shyu, Y. I., Liang, J., Tseng, M. Y., Li, H. J., Wu, C. C., Cheng, H. S., Chou, S. W., Chen, C. Y., Yang, C. T., Enhanced interdisciplinary care improves self-care ability and decreases emergency department visits for older Taiwanese patients over 2 years after hip- fracture surgery: a randomised controlled trial, International Journal of Nursing Studies, 56, 54- 62, 2016	Intervention not in PICO - comprehensive care includes referral for depression management but not part of treatment plan.
Shyu, Yea-Ing L., Liang, Jersey, Wu, Chi- Chuan, Su, Juin-Yih, Cheng, Huey-Shinn, Chou, Shih-Wei, Chen, Min-Chi, Yang, Ching-Tzu, Adunsky, Burke Cameron Cameron Cameron Chen Chuang Crotty Hollis Kraemer Lieberman Liou Rubin Liu Randell Rubin Ryan Schafer Shyu Chen Liang Vidan Yip, Interdisciplinary intervention for hip fracture in older Taiwanese: Benefits last for 1 year, The Journals of Gerontology: Series A: Biological Sciences and Medical Sciences, 63, 92-97, 2008	Intervention not in PICO - comprehensive care includes referral for depression management but not part of treatment plan
Shyu, Yea-Ing Lotus, Liang, Jersey, Wu, Chi- Chuan, Su, Juin-Yih, Cheng, Huey-Shinn, Chou, Shih-Wei, Yang, Ching-Tzu, Adunsky, Aharonoff Ahmad Burke Chen Chen Cleeland Crotty Dai Farnworth Huusko Huusko Katz Launer Lee Lee Liu Lu Magaziner Mellinger Mossey Munin Norton O'Cathain Ostir Rubenstein Runciman Sherrington Shyu Shyu Shyu Stuck Tappen Tinetti Tsai Tseng Von Sternberg Wang Wang Yip Yip, A Pilot Investigation of the Short-Term Effects of an Interdisciplinary Intervention Program on Elderly Patients with Hip Fracture in Taiwan, Journal of the American Geriatrics Society, 53, 811-818, 2005	Intervention not in PICO - comprehensive care includes referral for depression management but not part of treatment plan
Sibinga, E., Webb, L., Ellen, J., Mindfulness instruction improves anger regulation in US urban male youth, BMC Complementary and Alternative Medicine, 17, 2017	Conference abstract
Smith, M., Amputation: the transition from	Paper unavailable.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	Dessen for Eveloption
Study	Reason for Exclusion
hospital to home, Nursing times, 95, 52-53, 1999 Sorokin, Igor, De, Elise, Options for independent	Literature review - references checked for
bladder management in patients with spinal cord injury and hand function prohibiting intermittent catheterization, Neurourology and Urodynamics, 34, 167-76, 2015	studies, none were identified.
Spence, S. H., Cognitive-behavior therapy in the management of upper extremity cumulative trauma disorder, Journal of Occupational Rehabilitation, 8, 27-45, 1998	Narrative review
Spooner, A., A personal perspective: the psychological needs of spine-injured patients, Professional nurse (London, England), 10, 359- 362, 1995	Case study
Staffel, J. Gregory, Optimizing treatment of nasal fractures, The Laryngoscope, 112, 1709-19, 2002	Non-randomised study, n<100 per treatment arm.
Stanback, R., Rebuilding lives after injury, Nursing times, 110, 27, 2014	Editorial
Stoddard, F. J., Sorrentino, E. A., Murphy, J. M., Chedekel, D. S., White, G. W., Saxe, G. N., Buterbaugh, D., Doyne, T., Zbell, T., Clark, S., Benefits of an intervention to reduce stress in 0- 5 year olds with burns: Updated findings, Journal of Burn Care and Research, 32, S147, 2011	Conference abstract
Sullivan, Michael J. L., Adams, Heather, Thibault, Pascal, Corbiere, Marc, Stanish, William D., Initial depression severity and the trajectory of recovery following cognitive- behavioral intervention for work disability, Journal of Occupational Rehabilitation, 16, 63- 74, 2006	Comparison not in PICO - people with differing levels of depression
Sveen, Josefin, Andersson, Gerhard, Buhrman, Bo, Sjoberg, Folke, Willebrand, Mimmie, Internet-based information and support program for parents of children with burns: A randomized controlled trial, Burns : journal of the International Society for Burn Injuries, 43, 583- 591, 2017	Outcomes not in PICO - parent's PTSD, parent's health, child's health as perceived by parent and research participation
Tang, D., Li-Tsang, C. W. P., Au, R. K. C., Li, K. C., Yi, X. F., Liao, L. R., Cao, H. Y., Feng, Y. N., Liu, C. S., Functional Outcomes of Burn Patients with or Without Rehabilitation in Mainland China, Hong Kong Journal of Occupational Therapy, 26, 15-23, 2015	Non-randomised study, n<100 per treatment arm.
Task Force on Community Preventive, Services, Recommendations to reduce psychological harm from traumatic events among children and adolescents, American journal of preventive medicine, 35, 314-6, 2008	Narrative review
Taylor, Rumina, Mellotte, Harriet, Griffiths, Maria, Compton, Agnes, Valsraj, Koravangattu, Aaltonen, Angermeyer Askey Barkham Berglund Borghetti Valer Boye Broadbent Carter Cohen Connell Crisp Falloon Falloon Fleury Garcia Glick Gracio Kuipers Mansell Norman Novak	No comparative data.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Study Onwumere Schweitzer Stanbridge Stanbridge Tennant Worthington, Carers matter: Promoting the inclusion of families within acute inpatient settings, Journal of Psychiatric Intensive Care, 12, 69-77, 2016	
Tecic, Tanja, Schneider, Alexandra, Althaus, Astrid, Schmidt, Yvette, Bierbaum, Christine, Lefering, Rolf, Mueller, Dirk, Bouillon, Bertil, Janssen, Christian, Pfaff, Holger, Erli, Hans J., Rangger, Christoph, Neugebauer, Edmund A. M., Early short-term inpatient psychotherapeutic treatment versus continued outpatient psychotherapy on psychosocial outcome: a randomized controlled trial in trauma patients, The Journal of trauma, 70, 433-41, 2011	Intervention not in PICO - psychotherapy designed to reduce PTSD
Theodorakis, Y., Beneca, A., Malliou, P., Goudas, M., Examining psychological factors during injury rehabilitation, Journal of Sport Rehabilitation, 6, 355-363, 1997	Non-randomised study, n<100 per treatment arm.
Thieme, Holm, Morkisch, Nadine, Rietz, Christian, Dohle, Christian, Borgetto, Bernhard, Acerra, Attal Bellelli Bowering Breivik Breivik Brodie Buccino Cacchio Cacchio Celnik Chan Chapman Christakou Decety Dickstein Dohle Dworkin Dworkin Ezendam Finnerup Flor Galer Gaskin Giraux Gore Gore Gustorff Holen Hoyek Jensen Kumar Lebon MacIver Maher Maihofner Manca McCabe Michenthaler Michielsen Moseley Moseley Moseley Nemeth O'Connell O'Connor Park Pelosin Perry Ramachandran Ramachandran Rothgangel Savas Seidel Stein Straube Sumitani Swart Thieme Ulger Villiger Zimmermann-Schlatter, The efficacy of movement representation techniques for treatment of limb pain-A systematic review and meta-analysis, The Journal of Pain, 17, 167-180, 2016	Systematic review - studies checked for possible inclusion. None were identified.
Tidoni, E., Tieri, G., Aglioti, S. M., Aflalo, Aglioti Aglioti Aglioti Aglioti Alimardani Alkadhi Arrighi Awad Berlucchi Bickenbach Birbaumer Birbaumer Boord Botvinick Bruehlmeier Brumberg Castro Cermik Choi Collinger Corbetta Cramer Cramer Crawley Curt Curt Curt Daly De Vignemont Decety Di Rienzo Di Rienzo Do Enzinger Finnerup Fiori Freund Freund Fuentes Gergondet Goodwin Gourab Green Green Guger Guger Gustin Gustin Gustin Henderson Herbert Hochberg Hohne Hotz- Boendermaker Hou Huggins Ikegami Jensen Jurkiewicz Jurkiewicz Kakulas Kalckert Kalckert Kambi King Kirshblum Koenraadt Kumru Lacourse Lebedev Lee Leeb Leeb Leeb Lenggenhager Lenggenhager Leonardis Leonardis Lotze Mak Manson Mattia Mikulis Millan Mole Moore Nardone Nardone Neuper Onose Ortner Pascoal-Faria Perez-Marcos Pernigo Pfurtscheller Pfurtscheller Pfurtscheller Pisotta Pons Rodrigues Roelcke Rognoni Rosso Roy Rupp Sabbah Sabre Sakurada Sanchez-	Narrative review

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

StudyReason for ExclusionVives Scandola Scherer Scivoletto Serino Shoham Soler Tidoni Tidoni Tidoni Tidoni Tidri Tinzzzi Touzalin-Chretien Tran Truccolo Tsakiris Van Gorp Villiger Vuckovic Wang Williams Wolpaw Wrigley Wydenkeller Xu Yao Yoon Zhu, Re-establishing the disrupted sensorimotor loop in deafferented and deefferented people: The case of spinal cord injuries, Neuropsychologia, 79, 301-309, 2015Systematic review - studies checked for possible inclusion. None were identified.Tung, J. Y., Stead, B., Mann, W., Ba'Pham, Popovic, M. R., Assistive technologies for self- managed pressure ulcer prevention in spinal cord injury: A scoping review, Journal of Rehabilitation Research and Development, 52, 131-148, 2015Systematic review - studies checked for possible inclusion. None were identified.Turpin, G., Downes, M., Mason, S., Effectiveness of giving self-help information acute traumatic injury: a randomised controlled trial, British Journal of Psychiatry, 187, 76â 82, 2005Duplicate paperTurpin, G., Downs, M., Mason, S., Effectiveness of providing self-help information folowing acute trammatic injury: randomised controlled trial, British journal of psychiatry, 187, 76â 82, 2005Population not in PICO - " survivors of road trafic accident, occupational injury or assault at risk of developing PTSD.Uturnen, K., Salpakoski, A., Edgren, J., Tormakangas, T., Arkela, M., Kallinen, M., Pesola, M., Hartikainen, S., Nikander, R., Sipila, S., Physical Activity Affer a Hip Fracture: Effect of a Multicomponent Home-Based Rehabilitation Program-A Secondary Analysis of a Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 98, 981- 986, 2017Description of interventionVan Biervliet, A., Gest, T. R.,
Shoham Soler Tidoni Tidoni Tidoni Tieri Tinzzi Touzalin-Chretien Tran Truccolo Tsakiris Van Gorp Villiger Vuckovic Wang Williams Wolpaw Wrigley Wydenkeller Xu Yao Yoon Zhu, Re-establishing the disrupted sensorimotor loop in deafferented and deefferented people: The case of spinal cord injuries, Neuropsychologia, 79, 301-309, 2015Systematic review - studies checked for possible inclusion. None were identified.Tung, J. Y., Stead, B., Mann, W., Ba'Pham, Popovic, M. R., Assistive technologies for self- managed pressure ulcer prevention in spinal cord injury: A scoping review, Journal of Rehabilitation Research and Development, 52, 131-146, 2015Systematic review - studies checked for possible inclusion. None were identified.Turpin, G., Downes, M., Mason, S., Effectiveness of giving self-help information acute traumatic injury: a randomised controlled tral, British Journal of Psychiatry, 187, 76á 82, 2005Duplicate paperTurpin, G., Downs, M., Mason, S., Effectiveness of providing self-help information following acute traumatic injury: randomised controlled trial, British journal of psychiatry, 187, 76á 82, 2005Dopulation not in PICO - " survivors of road traffic accident, occupational injury or assault at risk of developing PTSD.Turunen, K., Salpakoski, A., Edgren, J., Tormakangas, T., Arkela, M., Kallinen, M., Pesola, M., Hartikainen, S., Nikander, R., Sipila, S., Physical Activity After a Hip Fracture: Effect of a Multicomponent Home-Based Rehabilitation Program-A Secondary Analysis of a Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 98, 981- 988, 2017Outcomes not in PICO - physical activityVan Biervliet, A., Gest, T. R., A multimedia guide to spinal cord injury: empowerment through self instruction, Me
 Popovic, M. R., Assistive technologies for self- managed pressure ulcer prevention in spinal cord injury: A scoping review, Journal of Rehabilitation Research and Development, 52, 131-146, 2015 Turpin, G., Downes, M., Mason, S., Effectiveness of giving self-help information acute traumatic injury: a randomised controlled trial, British Journal of Psychiatry, 187, 76â 82, 2005 Turpin, G., Downs, M., Mason, S., Effectiveness of providing self-help information following acute traumatic injury: randomised controlled trial, British journal of psychiatry, 187, 76â 82, 2005 Turunen, K., Salpakoski, A., Edgren, J., Tormakangas, T., Arkela, M., Kalinen, M., Pesola, M., Hartikainen, S., Nikander, R., Sipila, S., Physical Activity After a Hip Fracture: Effect of a Multicomponent Home-Based Rehabilitation Program-A Secondary Analysis of a Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 98, 981- 988, 2017 Van Biervliet, A., Gest, T. R., A multimedia guide to spinal cord injury: empowerment through self instruction, Medinfo. MEDINFO, 8 Pt 2, 1701, 1995 van Langeveld, S. A., Post, M. W., van Asbeck, Duplicate paper
Effectiveness of giving self-help information acute traumatic injury: a randomised controlled trial, British Journal of Psychiatry, 187, 76å 82, 2005Population not in PICO - " survivors of road traffic accident, occupational injury or assault at risk of developing PTSD.Turpin, G., Downs, M., Mason, S., Effectiveness of providing self-help information following acute traumatic injury: randomised controlled trial, British journal of psychiatry, 187, 76å 82, 2005Population not in PICO - " survivors of road traffic accident, occupational injury or assault at risk of developing PTSD.Turunen, K., Salpakoski, A., Edgren, J., Tormakangas, T., Arkela, M., Kallinen, M., Pesola, M., Hartikainen, S., Nikander, R., Sipila, S., Physical Activity After a Hip Fracture: Effect of a Multicomponent Home-Based Rehabilitation Program-A Secondary Analysis of a Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 98, 981- 988, 2017Outcomes not in PICO - physical activityVan Biervliet, A., Gest, T. R., A multimedia guide to spinal cord injury: empowerment through self instruction, Medinfo. MEDINFO, 8 Pt 2, 1701, 1995Description of interventionvan Langeveld, S. A., Post, M. W., van Asbeck,Duplicate paper
of providing self-help information following acute traumatic injury: randomised controlled trial, British journal of psychiatry, 187, 76â 82, 2005traffic accident, occupational injury or assault at
 Tormakangas, T., Arkela, M., Kallinen, M., Pesola, M., Hartikainen, S., Nikander, R., Sipila, S., Physical Activity After a Hip Fracture: Effect of a Multicomponent Home-Based Rehabilitation Program-A Secondary Analysis of a Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 98, 981- 988, 2017 Van Biervliet, A., Gest, T. R., A multimedia guide to spinal cord injury: empowerment through self instruction, Medinfo. MEDINFO, 8 Pt 2, 1701, 1995 van Langeveld, S. A., Post, M. W., van Asbeck, Duplicate paper
to spinal cord injury: empowerment through self instruction, Medinfo. MEDINFO, 8 Pt 2, 1701, 1995 van Langeveld, S. A., Post, M. W., van Asbeck, Duplicate paper
F. W., ter Horst, P., Leenders, J., Postma, K., Lindeman, E., Reliability of a New Classification System for Mobility and Self-Care in Spinal Cord Injury Rehabilitation: The Spinal Cord Injury- Interventions Classification System, Archives of Physical Medicine and Rehabilitation, 90, 1229- 1236, 2009
Visser, E., Gosens, T., Den Oudsten, B. L., De Vries, J., The course, prediction, and treatment of acute and posttraumatic stress in trauma patients: A systematic review, Journal of Trauma and Acute Care Surgery, 82, 1158-1183, 2017
Vogel, L. C., Anderson, C. J., Spinal cordNarrative reviewinjuries in children and adolescents: A review,Journal of Spinal Cord Medicine, 26, 193-203,20032003
Vranceanu, A. M., Hageman, M., Strooker, J., ter Meulen, D., Vrahas, M., Ring, D., A Intervention not in PICO - specific pain management intervention.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

	Provide Factoria
Study preliminary RCT of a mind body skills based	Reason for Exclusion
intervention addressing mood and coping strategies in patients with acute orthopaedic trauma, Injury, 46, 552â 557, 2015	
Wang, Zhiyun, Wang, Jianping, Maercker, Andreas, Program Use and Outcome Change in a Web-Based Trauma Intervention: Individual and Social Factors, Journal of Medical Internet Research, 18, e243, 2016	No comparative data
Watkins, P. N., Cook, E. L., May, S. R., Still, J. M., Jr., Luterman, A., Purvis, R. J., Postburn psychologic adaptation of family members of patients with burns, The Journal of burn care & rehabilitation, 17, 78-92, 1996	Case series
Wegener, Stephen T., Mackenzie, Ellen J., Ephraim, Patti, Ehde, Dawn, Williams, Rhonda, Self-management improves outcomes in persons with limb loss, Archives of Physical Medicine and Rehabilitation, 90, 373-80, 2009	Population not in PICO - support groups for amputees
Wethington, Holly R., Hahn, Robert A., Fuqua- Whitley, Dawna S., Sipe, Theresa Ann, Crosby, Alex E., Johnson, Robert L., Liberman, Akiva M., Moscicki, Eve, Price, Leshawndra N., Tuma, Farris K., Kalra, Geetika, Chattopadhyay, Sajal K., Task Force on Community Preventive, Services, The effectiveness of interventions to reduce psychological harm from traumatic events among children and adolescents: a systematic review, American journal of preventive medicine, 35, 287-313, 2008	Systematic review - studies checked for possible inclusion. None were identified.
Wheeler, Kathleen, Psychotherapeutic strategies for healing trauma, Perspectives in psychiatric care, 43, 132-41, 2007	Systematic review - studies checked for possible inclusion. None were identified.
Whitehead-Pleaux, A. M., Zebrowski, N., Baryza, M. J., Sheridan, R. L., Exploring the effects of music therapy on pediatric pain: phase 1, J Music Ther, 44, 217-41, 2007	Non-randomised study, n<100 per treatment arm.
Wiechman Askay, Shelley, Patterson, David R., Sharar, Samuel R., Mason, Shawn, Faber, Bertus, Pain management in patients with burn injuries, International review of psychiatry (Abingdon, England), 21, 522-30, 2009	Narrative review
Wiechman, S. A., Carrougher, G. J., Esselman, P. C., Angere, D., Klein, M. B., Gibran, N. S., A randomized controlled trial to test an expanded delivery model for patients with burn injuries, Journal of burn care & research, 35, S79, 2014	Conference abstract
 Wiechman, S. A., Carrougher, G. J., Esselman, P. C., Klein, M. B., Martinez, E. M., Engrav, L. H., Gibran, N. S., An expanded delivery model for outpatient burn rehabilitation, Journal of burn care & research, 36, 14-22, 2015 	Population not in PICO – over 18 years old
Wilde, Mary H., Fairbanks, Eileen, Parshall, Robert, Zhang, Feng, Miner, Sarah, Thayer, Deborah, Harrington, Brian, Brasch, Judith, McMahon, James M., Development of a Web- Based Self-management Intervention for	Non-randomised study, n<100 per treatment arm.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
Intermittent Urinary Catheter Users With Spinal Cord Injury, Computers, informatics, nursing : CIN, 33, 478-86, 2015	
Wilde, Mary H., Fairbanks, Eileen, Parshall, Robert, Zhang, Feng, Miner, Sarah, Thayer, Deborah, Harrington, Brian, Brasch, Judith, Schneiderman, Dan, McMahon, James M., A Web-Based Self-Management Intervention for Intermittent Catheter Users, Urologic nursing, 35, 127-138, 2015	Narrative description of new intervetion
Williams, Reg Arthur, Gatien, Gary, Hagerty, Bonnie M., Kane, Michele, Otto, Laureen, Wilson, Candy, Throop, Meryia, Addressing psychosocial care using an interactive Web site for combat-wounded patients, Perspectives in psychiatric care, 49, 152-61, 2013	No comparative data
Winje, D., Ulvik, A., Confrontations with reality: crisis intervention services for traumatized families after a school bus accident in Norway, Journal of Traumatic Stress, 8, 429-44, 1995	Population not in PICO - survivors of school bus accident at risk of developing post traumatic stress disorder
Wise, James B., Ellis, Gary D., Trunnell, Eric P., Altmaier, Baechle Bandura Bandura Bandura Bandura Bandura Brill Brody Caruso Cohen Ewart Ewart Holloway Horn Janssen Janssen Janssen Kelley Lou Lox McAuley Mihalko Noreau Rejeski Semenick Smith Stevens Stone Stumbo Taylor Wise, Effects of a curriculum designed to generalize self-efficacy from weight- training exercises to activities of daily living among adults with spinal injuries, Journal of Applied Social Psychology, 32, 500-521, 2002	Non-randomised study, n<100 per treatment arm.
Worobey, L. A., Kirby, R. L., Heinemann, A. W., Krobot, E. A., Dyson-Hudson, T. A., Cowan, R. E., Pedersen, J. P., Shea, M., Boninger, M. L., Effectiveness of Group Wheelchair Skills Training for People With Spinal Cord Injury: A Randomized Controlled Trial, Archives of Physical Medicine and Rehabilitation, 97, 1777, 2016	Outcome not in PICO - Wheelchair Skills Test Questionnaire and Goal Attainment Scale score
Worobey, L., Boninger, M., Kirby, L., Preliminary results on effectiveness of group wheelchair skills training among individuals with spinal cord injury, Archives of Physical Medicine and Rehabilitation, 96, e25, 2015	Conference abstract
Wu, K. K. Y., A randomised controlled trial of brief cognitive-behavioural therapy and a self- help booklet as early interventions for post- traumatic stress after road trajfic accident, East Asian Archives of Psychiatry, 20, 46-47, 2010	Conference abstract
Xie, L. Q., Deng, Y. L., Zhang, J. P., Richmond, C. J., Tang, Y., Zhou, J., Effects of Progressive Muscle Relaxation Intervention in Extremity Fracture Surgery Patients, Western Journal of Nursing Research, 38, 155â 168, 2016	Outcomes not in PICO - state anxiety and self- efficacy
Zadro, J. R., Shirley, D., Simic, M., Mousavi, S. J., Ceprnja, D., Maka, K., Sung, J., Ferreira, P., Video-Game-Based Exercises for Older People	Intervention not in PICO - flexibility, body weight resistance, and aerobic exercises

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Study	Reason for Exclusion
With Chronic Low Back Pain: A Randomized Controlledtable Trial (GAMEBACK), Physical Therapy, 99, 14-27, 2019	
Zhang, H., Huang, J., Long, C., Influence of psychological intervention before emergent ocular trauma surgery on patients' negative emotions, Eye science, 29, 74-77, 2014	Intervention not in PICO - pre-surgery psychological programme
Zidén, L., Frändin, K., Kreuter, M., Home rehabilitation after hip fracture. A randomized controlled study on balance confidence, physical function and everyday activities, Clinical Rehabilitation, 22, 1019-1033, 2008	Population not in PICO – over 18 years old

1 Economic studies

- 2 All studies were excluded at the initial title and abstract screening stage. See appendix G for
- 3 further information.
- 4
- 5

1 Appendix L – Research recommendations

2 Research recommendations for review questions:

- 3 **B.3a** What psychological and psychosocial rehabilitation interventions are
- effective and acceptable for adults with complex rehabilitation needs after
 traumatic injury?

B.3b What psychological and psychosocial rehabilitation interventions are effective and acceptable for children and young people with complex rehabilitation needs after traumatic injury?

9 **Research question**

10 What is the effectiveness of rehabilitation programmes combined with self-management

- 11 materials compared with rehabilitation programmes alone in people with complex
- 12 rehabilitation needs after a traumatic injury?

13 Why this is important?

14 Currently, standard rehabilitation for individuals with traumatic injuries lack self-management

15 material to complement currently utilised rehabilitation methods such as therapist-led

16 individual or groups sessions. There are many areas of rehabilitation that could be

17 supported with good quality material.

18 The evidence is unclear whether providing self-management material would be effective in

19 helping the people rehabilitate following traumatic injuries. However, it has been utilised

20 effectively with other patient groups (for example, people suffering with arthritic pain and type

21 2 diabetes. There would be an initial cost to produce the material, however high volume of

22 patients and their carers and family could benefit from this material. It may also reduce the

23 need for people to utilise certain resources (for example, GP consultations).

24 Table 26: Research recommendation rationale

Research question	
Why is this needed	
Importance to 'patients' or the population	Rehabilitation for patients can be complex and multifaceted. No single professional will be an 'expert' in all the areas that the patient may require help for example from pain management to sleep issues to dietary advice. Furthermore, there may be questions that patients feel uneasy asking their medical team or therapists. Rehabilitation aims to maximise people's independence, and the ability to self-manage aspects of their rehabilitation is important in progress towards their own individual goals. Self- management materials may be helpful for patients and their carers to take ownership of aspects of their rehabilitation and thus lead to improvements in their health-related quality of life and general well-being. It may also reduce the resource impact on other services e.g. G.P. appointments.

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Research question	
Relevance to NICE guidance	High - The committee were unable to issue strong recommendations on the use of self-management material alongside rehabilitation interventions due to a lack good quality evidence. The committee used their experience and expertise and evidence of low certainty to make weak recommendations instead. By conducting research in this area, it is hoped that more definitive NICE guidance on the use of self-management materials in rehabilitation can be issued in future iterations of this guideline.
Relevance to the NHS	High – it already exists in some NHS patient groups e.g. Escape-pain programme for those with arthritic pain and HeLP Diabetes an online tool for those with type 2 diabetes. With a moderate initial outlay, the materials could be provided to a high volume of patients and family/carers. Whilst improving the patient's quality of life it may also have positive resource implications throughout the patient's rehabilitation journey such as reduction in GP appointments.
National priorities	• The NHS long term plan (2019) supports self- management programmes in a number of clinical areas e.g. diabetes. The long term plan also wants digital technology to be driving the way for patient's to access advice and care.
Current evidence base	Four studies (3 randomised controlled trials and 1 non-randomised comparative study) conducted in diverse adult populations with complex rehabilitation needs (adults with \geq 1 extremity injury; older adults with hip or vertebral fracture; adults with chronic spinal cord injury; and adults with burns, respectively) investigating the use of wide-varying self-management interventions (standard care plus access to a trauma support network versus standard care alone; small-group learning programme plus home-training schedule versus standard care and rehabilitation; active behaviour intervention programme plus information booklet versus single information meeting and information booklet; and motivational self-care CD plus routine self-care information versus routine self-care information alone, respectively). The evidence provided by these 4 studies were of low or very low certainty for all reported outcomes.
Equality	Self-management materials already exist for certain NHS patient groups e.g. chronic pain patients. All people with complex trauma deserve to receive optimal care and materials, just like other patient groups, to achieve the best possible outcomes.
Feasibility	A prospective multi-centre randomised controlled trial would allow trauma units to continue their current rehabilitation ('standard care') and should

Psychological and psychosocial rehabilitation interventions for people with complex rehabilitation needs after traumatic injury

Research question	
	have little impact on their practice.
Other comments	None.

- 1 NHS: National Health Service; NICE: National Institute for Health and Care Excellence; RCT:
- 2 randomised controlled trial

3 Table 27: Research recommendation modified PICO table

Criterion	Explanation
Population	• People with complex rehabilitation needs resulting from traumatic injury that requires admission to hospital
Intervention	• Rehabilitation programme combined with self-help materials, e.g., booklets, video, apps.
Comparator	 Same rehabilitation programme as the intervention group, but without self-help materials
Outcomes	 Overall quality of life (validated scales) Patient acceptability (any direct measure) Changes in activity of daily living (validated scales) Changes in mood (validated scales) Changes in mood (validated scales) Return to nursery, education or work Resource use i.e., hospital re-admissions, outpatient visits, primary and community care visits
Study design	Randomised controlled trial
Timeframe	12-24 months
Additional information	None.

4